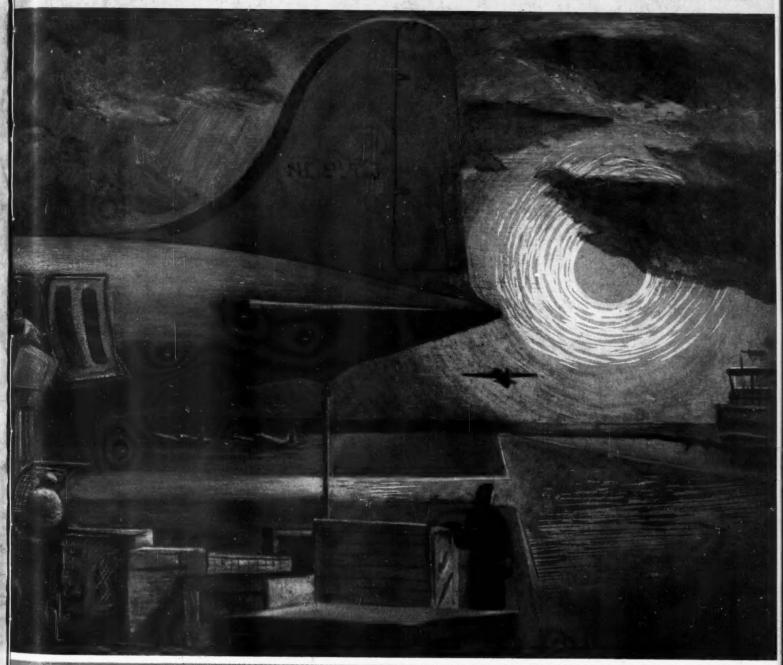
WORLD - WIDE

# TRANSPORTATION

[REG. U. S. PAT. OFF.]

THE WORLD'S FIRST AND ONLY AIR CARGO MAGAZINE



"Cargo by Air"

Vol. 12 . No. 2

IN THIS ISSUE

FEBRUARY 1948

Spotlighting the United States-Alaska Air Cargo Potential • America's Cargoplane Needs • Winged Merchandising Pays Off • What the President's Air Policy Commission Recommends for Air Cargo

in addition to your regular features including the siz-page table of current international air cargo, air mail, and air insurance rates



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SURELY the longest trip ever undertaken by a pair of baby shoes was reported from Spokane, Washington. recently. The tiny footwear was air-expressed all the way from the Pacific Northwest to Lima, Peru, then transferred to local transport service for dispatch to nearby Maracocha, Peru, where the one-year-old lives with his parents. It seems that baby shoes are difficult to come by in Maracocha, the child's mother wrote. So she sent prints of her youngster's tootsies to the baby's grandmother and asked that the shoes be rushed down in time for Christmas. The owner of a juvenile shoe shop in Spokane took personal charge of wrapping and addressing the package before turning it over to the Air Express Division of REA. Her tiny-tot shoe shop, she revealed, has acquired some 18 overseas customers for baby shoes within the past year, and the list of shoe-hungry infants just grows and grows. Within re-cent months the shop has air-expressed baby shoes to Germany and Japan as well as to other foreign places where they cannot be obtained readily.

FLYING PAJAMAS and Air Express were acclaimed recently by a New York underwear manufacturer who told of a shipment of pajamas leaving his Alabama mills and arriving at a Los Angeles department store within 48 hours after the order was placed. Sold out in a short time, the items were re-ordered by phone, "and Air Express once again delivered the goods within 48 hours of the re-order," reports The Daily News Record. Total weight of all shipments was 2,500 pounds, it was reported.

HOLIDAY ECHOES: The industrial progress of Mississippi and the dignity of New England was upheld a few weeks before Christmas when nearly 8,000 pounds of men's cotton dress shirts were air-expressed from Jackson to some 80 destina-tions in the New England states. The prize consignment, largest Air Express shipment ever to be handled through the Jackson office, was packed in 142 cartons and dispatched via the two scheduled airand dispatched via the two scheduled airlines serving Jackson . . . Cotton also made the headlines in the Memphis Commercial Appeal recently as The Cotton Trade Journal announced plans to ship its weekly issue to Europe and India by Air Express. Copies are flown to key European cities, then placed in the mails for delivery to foreign subscribers.

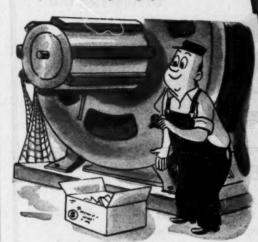
TO CHARACTERIZE it as a crisis didn't tell half the story. Here it was just a few days before Christmas and Santa Claus had run completely out of toys in his Dallas, Texas, sub-station of a big department store chain. There was only one thing to do. And that was to telegraph the nearest branch at Memphis for assistance. Luckily, the Memphis store had an adequate supply. And so, within four hours after the distress signals had gone out, a ton of toys has been air-expressed from Memphis to Dallas and the store's Santa Claus was much happier, because some Dallas youngsters weren't going to be disappointed after all.

# AIR--X--PRESS Every business uses this speedy service



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SCHEDULED A



(Trade Mark)

A NEW air-conditioned passenger lounge is being constructed by Pan American World Airways at Miami International Airport at a cost of about \$150,000.

Philippine Air Lines' air fare from San Francisco to Shanghai has been lowered from \$750 to \$726, while the fare from San Francisco to Hong Kong has been increased from \$700 to \$726. These changes are in keeping with resolutions passed at the recent IATA conference in Rio de Janeiro. The resolutions called for all member airlines to equalize their fares between common points of service.

American Airlines has inaugurated service into Richmond, Virginia, providing that city for the first time with through

coast-to-coast service and one-carrier transportation to Europe, Mexico and Canada.

A new type taximeter has been developed for airplanes. Instead of recording miles flown, however, it counts power-hours units turned out by the engine. The power-recorder was developed by Square D Company's Kollsman Instrument Division.

During 1945 there was a 100 percent change in hostess personnel of Braniff International Airways, but during 1947 only one-third of the girls gave up their air careers. Of these, approximately 75 percent have traded their jobs for matrimony. At the end of the war the majority of Braniff's hostesses were 22 years old, while average age is now 23.5.

A pension for American employees, in which management's contribution triples the investment made by its employees, was recently announced by C. F. C. Meuser, general manager of the North American Division of KLM. This plan is patterned after a similar arrangement which has been in effect in Holland for over 20 years and in which management and employees

have invested over \$4,000,000. Under the plan employees will contribute five percent, while the company will contribute at least 10 percent of their basic salary. Benefits of the pension plan will provide an old age pension at the age of 60 for women, 65 for men, to an annual amount of two percent for every year of service with the company, with a maximum of 70 percent of the employee's last basic salary. In addition, the plan will also provide for a survivor's pension for widows to the amount of 50 percent of the pension the employee would have been entitled to, while every child up to four in number, would receive 25 percent. In the case of total disability, the employee would receive an annual amount of two percent per year of service of the last basic salary; in case of partial disability proportionately smaller.

The Port of New York Authority had an operating profit during its first year of operating air terminals. From June 1, when the Authority took over operation of La-Guardia Field, to the end of last year, operating revenues totaled \$952,522 or \$50,000 more than all costs at both LaGuardia and Idlewild. The commissioners authorized the spending of \$830,000 for a 14,000-foot dyke at LaGuardia to protect it against high tides. The dyke is expected to be completed in five months.

A record average of 170 persons a day flew the Atlantic during 1947 aboard Clippers of Pan American World Airways, according to its year-end report. The total number of passengers transported across the ocean by Clipper during the year reached the all-time high of an estimated 62,000, more than double the 27,300 flown over last year.

The Naval Air Transport Service flew more than 320,000 passengers a total of almost 500,000,000 passenger-miles during 1947 with no passenger fatalities, according to an operations summary released by Rear Admiral J. W. Reeves, Jr., commander of NATS. Cargo ton-miles flown were 34,231,775, and mail ton-miles 10,760,292. Approximately 75 percent of the route miles flown by NATS lie outside the continental United States.

John F. Budd, publisher of AIR TRANS-PORTATION, and Joseph Gamburg, general manager of Air Clearance, Inc., recently gave separate lectures on various phases of commercial air transportation—with special emphasis on air cargo—to graduate students of foreign trade techniques at New York University.



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Established October, 1942

AIR TRANSPORTATION, published on the 15th of each month, is devoted (1) to the furtherance of air cargo as the newest and most significant form of freight transportation, (2) the promotion of domestic and international air commerce as an integral factor in progress, prosperity and peace; and (3) the establishment of a safe and sound national as well as international air transportation system. Subscription rate for United States and Possessions, \$5.00 for one year, \$8.00 for two years, and \$11.00 for three years; foreign countries, \$6.00 for one year, \$10.00 for two years, and \$14.00 for three years.

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#### COVER

Franklin Boggs' painting, Cargo by Air, reproduced through the courtesy of the National City Bank of New York.

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by David N. Laux, Vice President Sports Afield Magazine



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George B. Kiely

# Guest Air Cargo Editorial

No. 4

By GEORGE B. KIELY

President

Freight Cargo Agency, Inc.

THE CONGRESS OF THE UNITED STATES seems to have an overflowing amount of generosity in giving away public monies for foreign relief, but when any constructive ideas are put forth for the preservation of our worldwide air transportation leadership, their humanitarian feelings seem to cease and they are afflicted with what appears to be a bad case of suspended animation. Current foreign relief programs call for a "personal" message to the boys in Washington. Don't they know we have cargo aircraft?

The Bland Freight Forwarding Act, which was created in the lend-lease days and which related only to the forwarding of waterborne shipments made under United States expenditures or purchases, has now become a relic of the horse-and-buggy days. World air transportation, like the atom bomb, has brought new ideas and made us realize that speed is an essential factor in life today. It is high time that this Congress recognizes the important place that air transportation—and particularly the movement of overseas freight by air—is one of the ways in which the American manufacturer can preserve his place in world commerce. In the matter of urgently needed relief goods, this is the "fastest and bestest" way to face the enemy—the enemy in this case being hunger, death, distressed nations, and growing animosity toward the American Way of Life.

Steamers in foreign commerce can always count on moving those items of cargo which cannot be placed within the available cargo aircraft, or those items which, due to their low value or non-emergency status, need not reach the foreign destination quickly.

Congress will not alienate the affections of the steamship industry if it is wise enough to see that the European Recovery Program, and particularly the Interim Relief Bill, is a fine opportunity to use the cargo services of not only the regular commercial airlines flying overseas, but also of the non-scheduled airlines which are mostly owned and financed by former GIs. These so-called GI airlines serve a legitimate and desirable function for the public's good. Like the certificated lines, they truly represent our reserve air power when the armed forces air reserve is at such low ebb. The Bland Act—admittedly within the realm of the Maritime Commission, but logically applicable to air commerce—should be revised at once to allow the use of American Flag aircraft to carry urgently required relief goods overseas.

This business should be given to responsible irregular air carriers as well as to regular lines—on documentation by qualified foreign freight forwarders. The same freight forwarder, who would be authorized under the amended Bland Act to handle his share of governmental relief shipments by steamer, can also easily arrange to use air cargo on the items which should be set aside for air movement because of urgent need, fragility, or high evaluation. The airplane can deliver quickly and safely to interior destinations in Europe, whereas shipment by steamers often is delayed due to transhipment.

The policy of "to each his own" can be furthered in the movement of these relief shipments using both sea and air; however, in the latter case, transportation should be in aircraft under American franchise.

Luckily, we have not followed the mistake of giving away our transport planes in the same openhanded manner as with some of the best freight vessels proposed as "gifts" to the sixteen ERP-aid nations. Two little words, "air and," added to the wording of the Bland Freight Forwarding Act, will create this New Year's gift to the airlines, and to the foreign freight forwarders as well.

The airlines and freight forwarders are all definitely part of international commerce. They expect fair play from Congress. Limiting the Bland Act to maritime transport amounts to discrimination against air shipping. Let's adjust the situation right now—with two little words—and bring the law up to date. If it calls for CAB cooperation, then by all means, go to it.

Bring the law up to date, or let's have a new one!

# WHAT THE PRESIDENT'S Air Policy Commission RECOMMENDS FOR AIR CARGO

HE question of air cargo development has been widely discussed. The issues appear to be two: (1) Should the potential market for air cargo by common carriers be spread among more lines than now exist in the category, and (2) should there be subsidy stimulation of cargo carriage by common or contract carriers, or both?

Property carried by air has increased strikingly since the end of the war although there has been some carriage of property by air as long as there has been air transportation. It was slowly and steadily growing in the period just before the war. Several factors account for the fact that since the war more air cargo has been carried by noncertificated carriers than by certificated carriers.

One was the necessary concentration of the certificated lines on handling passenger traffic which was overwhelming their equipment. This required the concentration of management upon that problem and the use of available financing for the building up of the passenger-fleet. Another factor was the existence of large numbers of military surplus cargoplanes available at low cost and on easy terms from the War Assets Administration.

A third factor was the large number of men who started and operated air cargo lines and developed traffic; but at rates too low to cover their costs of operation. Their activity created an increasing consciousness in the shippers' minds of the possibilities of air cargo service. Yet another factor was the aggressiveness and lasting power of a few of the more rugged organizations which entered the air cargo field.

Cargo operations by noncertificated lines were carried on as contract carrier operations. The certificated carriers gave only their secondary attention to the increase of air cargo. With the realization that postwar passenger business was not going to be as great as had been expected, and with the striking results of aggressive management on the part of some of the contract operators becoming evident, the certificated airline managements, while bedeviled with organization and safety problems, nevertheless began to turn with more and more energy to the development of the cargo business.

In regard to the first issue (spreading air cargo among more lines than now exist as common carriers) as we have said above, most common carrier air lines certificated for the carriage of passengers, property, and mail, after a steady progression toward self-sufficiency from 1938 to 1946 have suffered a serious setback. Our major problem is to get them started once again up the ladder toward self-sufficiency. To advocate at this time the entry into this field of a large number of new carriers would certainly seem to postpone rather than hasten the attainment of such a state.

The Civil Aeronautics Board has faced this problem of the economic number of companies since 1938, in regard to the carriage of both passengers and property, although the problem has only recently been focused in the direction of property. The basic question to be decided by the Board is whether the public convenience and necessity require that additional service be supplied and if so whether it should be supplied by expanding the service of existing lines or by letting in additional carriers. This is exactly the kind of problem for which the act of 1938 has provided a Civil Aeronautics Board and it is certainly not for this Commission to recommend the decision.

We do express our belief, however, that in deciding on certificates for new cargo operations, the Board should avoid impairing the soundness of the existing air transport system by spreading the present and potential traffic among too many separate carriers. If the Board finds that the public convenience and necessity does require some additional common carrier operators, we hope that it will give weight to the records built up by any of those contract operators that have proven their ability to operate economically and efficiently and now desire common carrier status. The Board will also undoubtedly give serious consideration to the suggestion that certification for cargo operations should apply between and within specified areas rather than between fixed terminii.

In regard to the second issue raised above (a subsidy stimulation of cargo carriage), we feel that the only excuse for the subsidization of cargo carriage by air at this time would be to develop a fleet of cargoplanes to act as a military pool for emergency use. One way to meet the military need would be for the services to buy the air transports the same way that they buy combat aircraft. Congress may decide not to appropriate money for this purpose and may prefer to obtain replacements and additions to the present military transport fleet reserve, through subsidizing the carriage of cargo by air. If it chooses the latter method, it will undoubtedly weigh the effect of such a course would have no other forms of transport since it might well raise the possibility of a subsidy or reduction in taxes to these forms to make possible the readiness for war loads on such transportation. The problem of building up a pool of military transport planes in commercial use seems to warrant a more coordinated study of the number of transports needed, the potential commercial cargo traffic, and the possible subsidy cost to the Government than has been carried on by the armed services, the Department of Commerce, and the Civil Aeronautics Board. We recommend that the problem receive the immediate attention of the Air Coordinating Committee.

Witness after witness has testified to the difficulty of obtaining the amounts of private capital that are needed to develop new and advanced types of airplanes.

The soundest way to build up a pool of cargoplanes for an emergency is to develop a cargoplane that can operate on a profitable basis. We are recommending the creation of an Aircraft Development Corporation whose initial and primary task could be the development of an all-cargo transport airplane. Such a plane would of course have to be useful to the military; but it should be designed primarily with a view to economic commercial operation.

# M. P. BICKLEY Manager of Cargo Sales United Air Lines

THE commission's report on air cargo development is constructive. In general, its recommendations are a big step in the right direction. We heartily concur that economic regulation of all carriers is a proper function of the CAB. The scheduled airlines as presently constituted and flying present routes are in a position to expand their facilities to meet all requirements of the American shipping public. The report properly raises the point of dividing the air cargo market among too many separate carriers with possible impairment in the overall service. There is merit to the recommendation for development of an economically sound, all-cargo type of plane which we feel is badly needed in air commerce today.

#### TED GILMORE

Superintendent, Air Mail-Cargo
MID-CONTINENT AIRLINES

UR operations differ somewhat from that of most trunk lines. We are, for the most part, strictly a North-South carrier. As such, it is only natural that our opinions will vary.

Briefly, I hardly think that the potential market for air cargo would be benefited by certification of more carriers. Rather, it appears that an airplane better adapted for handling the less-than-planeload lots would tend to develop this phase of air transport more than any other one factor. By lessthan-planeload lots, I refer to that type traffic which presently accounts for my estimate as 95 percent of all air cargo; cargo which is composed of individual pieces requiring no more than man power and a mechanical lift for loading and unloading. The airplane, principally, should have larger bin doors to facilitate faster and easier loading. Also, this airplane should be so constructed that it may be utilized for both passengers and cargo and more economical in operation than others now in service.

Regarding the matter of subsidization for the development of air cargo: yes, it may be that such a step would be necessary, but only if aircraft manufacturers are delayed in the development of the type aforementioned. I am not, however, in position to say whether the subsidy, if needed, should go to the manufacturers or carriers. Yet, it would seem that any subsidy could be of a greater advantage to the manufacturer—emergency use for military purpose must be kept in mind.

Though brief, I think the Commis-

# AND WHAT AMERICA'S Top Air Cargo Men THINK

sion's view on air cargo is very comprehensive and is as complete as could be expected on such a new subject.

GERALD J. KELLER

Cargo Traffic-Sales Manager

CHICAGO AND SOUTHERN AIR LINES

HE recommendations of the President's Air Policy Commission for the development of air cargo represent the soundest basis—and at the same time a plea—for the continuation of the phase of an industry which provided such commendable service during the war and in these few postwar years has become a vital cog in the nation's transportation system. This Commission's recommendations serve as a recognition of these important peace and wartime services.

# ERIC RATH Executive Vice President GREAT CIRCLE AIRFREIGHTERS, LTD.

T is regrettable that the Commission has taken so little time out to study the position of indirect air carriers, air terminals, and air load services, in connection with the problem of air cargo itself. From the standpoint of national defense, a large fleet of transport aircraft is required. In order to support that fleet, and the connected services, and to keep these in readiness for any emergency the nation requires more air cargo ground facilities. The maintenance of air cargo ground service does not require subsidy stimulation but only a sound policy for the coordination of air and surface transportation. As the Finletter Committee has recommended that the problem receive immediate attention, we must conclude that the final solution of the Air Freight Forwarder Case, now pending before the CAB, must be decided at the same time.

REAR ADMIRAL LAWRENCE B. RICHARDSON, U.S.N. (Ret.)

Vice President

CURTISS-WRIGHT CORPORATION

FTER its thorough discussion and investigation on the subject, the President's Air Policy Commission's recognition of the importance of cargo aircraft for commercial and military operations is very heartening to the aircraft industry. The Commission's conclusion that the development of an efficient and economical cargoplane is the initial step which should be undertaken at high priority confirms our thinking. The industry and all others concerned know that this development is not feasible without Government support. Implementation of the best means to furnish this support is an urgent matter. Early action by the Administration and the Congress is needed to solve the problem.

# JOHN A. SMITH Cargo Sales Manager Continental Air Lines

HE management of Continental Air Lines is heartily in accord with the suggestions of the President's Air Policy Commission in their report contained on pages 112 through 115 related to air cargo development that in justice to the certificated carriers the Civil Aeronautics Board should avoid impairing the existence of the scheduled air transport system by spreading the cargo traffic among too many separate carriers. Also we are heartily in agreement with the Commission's suggestion relative to the sound development of an efficient cargocarrying aircraft suitable for immediate conversion to military craft should the occasion arise, and we recommend that the pool project be coordinated with the assistance of Air Cargo, Inc.

(Concluded on Page 36)

# SPOTLIGHTING THE UNITED STATES -



A HONEY OF A CATCH for the Little Tom, to be added to the total of Alaska's top industry. "Much of the Territory's fishing resources is as yet undeveloped," the authors say, pointing out that because of this food's quick deterioration in quality, shipment to the United States by air would aid sales immeasurably.



FLOWN FROM ONE ALASKAN POINT to another by Mount McKinley Airways, an Alaskan non-certificated line, cargo of hogs is transferred to truck for final leg of journey.

PAGE 10-AIR TRANSPORTATION-Air Commerce

By
P. L. BREAKIRON
and
R. W. HOECKER

ALASKA is the largest and northernmost of the United States territorial possessions. Although it is approximately one-fifth the size of the United States, it has a permanent population of only 74,524 (1940 census), most of whom live in or near the principal towns and cities of the Territory. The population is increased each Summer by an influx of tourists and workers.

Alaska's principal industries are mining, fishing, trapping, and lumbering. Only a few small and favorably situated areas of Alaska are suitable for agriculture. In 1939, the total commercial production of vegetables was harvested from about 1,200 acres. The vegetables harvested were cabbage, carrots, cauliflower, onions, rutabagas, and turnips. In the same year, currants, raspberries. and strawberries were harvested from 45 acres. Since 1939 the acreage of vegetables, as well as the variety grown, has increased considerably. The Winter climate is too severe and the growing season too short to allow the production of most of the common varieties of tree fruits.

Alaska never has grown enough fresh fruits and vegetables for local consumption. Production of adequate quantities of poultry and dairy products to meet local needs is hampered by the deficiency of grain production in the Territory and by the difficulty of curing forage properly for the Winter feeding of dairy herds. Therefore, Alaska is a food-deficient area and the larger part of its food supply must be shipped in from continental United States.

Transportation to and from Alaska is of two main kinds—water, which is by far the most important from the standpoint of volume, and air. Although the wartime-constructed Alaska Highway now provides a direct road connection between the Territory and continental United States, it has not yet been used extensively for transportation of freight into the Territory. Between various points in Alaska there are four principal forms of transportation—ocean and river steamer, railroad, motortruck, and airplane. Freight

# ALASKA AIR CARGO POTENTIAL

rates from Seattle to interior Alaskan points like Fairbanks are considerably higher, both absolutely and proportionally, than rates from Seattle to most Alaskan seacoast cities. Freight rates per ton-mile from Seattle to Alaska are also considerably higher than any in the United States. The freight charges on certain agricutural commodities from Seattle to Anchorage and Fairbanks constitute a margin against which air carriers could work in handling traffic.

As the needs of the population of Alaska are only partially met by local production, there is a demand there for almost all kinds of foodstuffs. It has been estimated that local production in the so-called railbelt area (the area adjacent to the rail line between Anchorage and Fairbanks) produced less than one-fifth of the volume of such products that were consumed in this area. The railbelt area is the most important agricultural area in Alaska and is the most thickly populated. The market for agricultural perishables in this railbelt is perhaps one of the best in the world. The high transportation rates (as illustrated in Table 1 and 2) and the slow delivery time of from seven to 12 days from Seattle by surface carriers allow the airplane a competitive advantage in hauling agricultural perishables that it does not possess in domestic operations. The products that can command the best market in Alaska are those for which freshness is especially desired. Milk, eggs, green vegetables, and fruits are in this category.

The rates from Seattle to Anchorage. shown in Table 1, when converted to cents per ton-mile, range from 4.4 cents to 8.2 cents for shipments in carload lots and from 5.4 cents to 8.2 cents for l.c.l. shipments. These charges constitute as much as a third of the retail price at Anchorage. The rates from Seattle to Fairbanks, shown in Table 2, when converted to cents per ton-mile range from 6.0 cents to 11.9 cents for carload lots and from 7.4 cents to 12.4 cents for l.c.l. shipments.

In addition to having to pay these high surface freight charges, the waste, damage, and pilferage of the perishables are reported to be high. As much as 50 percent of the original shipment of the more perishable items are reported to be often discarded at the dockside. These high losses partially account for the high rates, but the losses do not stop at the dockside. They continue through to the wholesalers and

In Washington there's a desire on the part of the CAB to stimulate more air cargo traffic between the United States and the Territory. But the Fairchild Engine and Airplane Corporation anticipated that when it assigned two former transportation economists for the United States Department of Agriculture to get the real lowdown. Here are the facts—plain as day and unabridged.

retailers, and help to account for the high margins taken by the intermediate handlers. Loss and damage have been greatly reduced when perishables are shipped by air direct from the production areas to the terminals.

Additional savings could be effected by crating and packaging the produce at shipping point or in the fields, especially for air shipments. Such produce as cauliflower, spinach, peas, lima beans, and sweet corn may be partially processed before air shipment and so leave most of the unedible parts at the shipping point rather than pay the freight charges for this waste material. Only about 10 pounds of cauliflower that is finally eaten is usually shipped in a 50-pound crate. By removing the leaves and part of the stem, the portion of a 50-pound box that is considered edible may be increased to 40 or 42 pounds. The same kind of saving may be effected by shelling peas and lima beans or

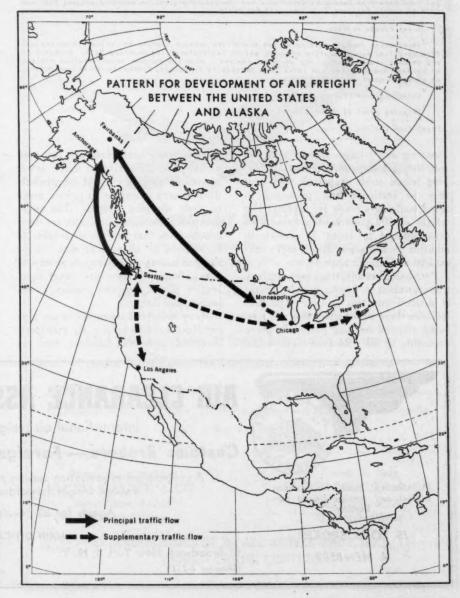


Table 1 - Relation of retail prices at Anchorage of selected commodities to their cost of transportation from points in the United States to Anchorage, Alaska, 1947

Seattle, Washington, to Anchorage, Alaska2

Commodity	-	ost ) pounds		st n-mile <sup>2</sup>	Percentage of retail price a Anchorage			
billion to an exemple of	Carload	L.c.l.	Carload	L.c.l.	Carload	L.c.1.		
metimal and boy asia	Dollars	Dollars	Cents	Cents	Percent	Percent		
Apples	3.20	3.86	4.44	5.35	14.5	17.5		
Butter	4.24	4.81	5.88	6.67	15			
Carrots	5.85	5.85	8.11	8.11	32.5	32.5		
Eggs	4.57	4.57	6.34	6.34	4.6	4.6		
Grapes	5.94	5.94	8.24	8.24	13.2	13.2		
Lemons	3.46	4.43	4.80	6.14				
Lettuce	5.86	5.86	8.13	8.13	11.7	11.7		
Milk (fresh)	3.85	4.93	5.34	6.84				
Oranges	3.45	4.42	4.79	6.13	17.3	22.1		
Pork. (fresh)	4.75	5.31	6.69	7.37	5.6	6.2		
Strawberries (frozen)	4.04	4.61	5.60	6.39				
Tomatoes	5.91	5.91	8.20	8.20	9.9	9.9		
		Selected C	aliformia p	points .to	Anchorage	3		
Grapes	7.22	7.22	6.6	6.6	16.0	16.0		
Lettuce <sup>5</sup>	7.34	7.34	5.8	5.8	14.7	14.7		
Tomatoes 5	7.29	7.29	5.8	5.8	12.2	12.2		

1 Costs include unloading, wharfage, and handling charges at Seattle, Wash., plus a 16 per "Costs include unloading, what age, and handling charges at Seattle, Wash., plus a lo percent surcharge for these services, the ocean freight rate from Seattle, Wash., to Seward, Alaska, via the Alaska Steamship Lines, plus surcharge, charges for refrigeration or cool room service on steamers, marine insurance between Seattle and Seward plus surcharge, and war risk insurance currently in effect, unloading, handling, and wharfage charges at Seward, railroad rate from Seward to Anchorage, and charges for protective services against heat and cold on Alaska Railroad from Seward to Anchorage.

Drawn from various sources.

shucking and trimming sweet corn before they are shipped. Instead of shipping whole fresh grapefruit, the fruit may be sectioned and packaged in small containers ready for serving. The weight of 100 pounds of grapefruit is thus reduced to about 33 pounds in addition to being put into a more convenient and usable form.

Perishable candidates for airplane transportation to Alaska may be roughly divided into two groups. The first includes those perishables that are now being shipped by boat but could move profitably by air. Because there would be less waste and damage, the commodities would arrive in much better condition, and they could be pre-handled in such a way as to reduce much of their shipping weight. The other group of perishable candidates are those commodities that are too perishable to be shipped at all now or that can be shipped during only relatively short seasons. Some of these are sweet corn, berries, plums, apricots, peaches, cantaloupes, and flowers.

Many industrial commodities are also excellent candidates for air transport. So-called style merchandise, such as women's dresses and shoes, and such other commodities as costume jewelry, magazines and newspapers, small electrical appliances, precision instruments, engine and automotive parts, machinery and machinery parts, and drugs and pharmaceuticals would all be likely to contribute to the air freight even though some continued to come by surface transport. The potential volume of nonagricultural candidates to be moved by air into Alaska probably is at least as large as the potential of agricultural perishables. This estimate is based on an anlysis of commodities that have moved by air.

As Alaska does not produce a surplus of either agricultural or industrial goods, there is practically nothing in the way of outbound commodities in these categories that could be handled on the backhaul operations to the United States. There is, however, a rather promising air-cargo potential in the Territory's fishing and fur industries.

It is generally considered that most furs are fairly perishable and their quality deteriorates under unfavorable conditions of storage and transportation. It is probable, therefore, that many of



Native fish cannery workers

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<sup>2</sup>Great circle mileage.

These costs include rail rates and protective service charges on carload shipments only from specified representative shipping points in California to Seattle, Wash. (subject to a 3 percent transportation tax on gross charges), plus the current transportation charges at carload and less-carload rates from Seattle to Anchorage, Alaska, for these commodities, as shown in upper section of table.

Shipping point Frenno, Calif.

Shipping point El Centro, Calif.

the furs produced in Alaska would be benefited from speed in reaching markets in continental United States. This would be particularly true of the more valuable furs. The present parcel post rates on furs from the central part of Alaska to Seattle is approximately 12 or 13 cents per pound—a ton-mile cost of about 18 cents.

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More than 1,900,000 furs, valued at \$1,910,900, were shipped from Alaska to the United States in 1939 (Table 3). During the war, the total number of pelts taken in Alaska decreased considerably, because many trappers entered the armed services or worked on defense projects in the Territory. Prices paid for furs during the war rose substantially above the prewar levels. In 1945, only 276,874 furs, valued at \$1,-037,906, were shipped from the Territory to the States. The average price of furs shipped in 1945 was \$8.18 as compared with an average price of \$1.01 for furs shipped in 1939. In general, most types of furs shipped from Alaska to the United States have a relatively high value per pound, a satisfactory bulk-to-weight relation and a certain degree of perishability. All of these characteristics are considered favorable from the viewpoint of shipment by air.

Fishing is Alaska's principal industry. The total catch in 1944 exceeded 460 million pounds. Much of the Territory's fishing resource is as yet undeveloped. As fish and other sea foods, when not processed, deteriorate quite rapidly in quality, they would benefit from the speed in shipment by air. If this type of traffic were picked up as near its source of supply as possible and shipped directly to the large consuming centers in the United States, the time in transit would be reduced materially.

From the standpoint of volume and value, salmon and halibut account for nearly two-thirds of the total fish industry in Alaska (Table 4). However, the same fishing grounds also produce relatively large quantities of shellfish, sablefish, rockfish, and lingcod. The shellfish-shrimp, the king crabs, and clams have given evidence under commercial conditions of being good candidates for air travel. During the past year planeloads of these shellfish were successfully flown from Alaska to the United States. It seems probable that a considerable tonnage of fresh salmon and halibut could be profitably marketed if flown to markets in the States.

Both the fishing and the fur industries of Alaska are seasonal. Generally speaking, commercial fishing in Alaskan waters takes place from April through September. Consequently, the greatest volume of sea food is shipped from Alaska during the Summer. Practically

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Table 2 - Relation of retail prices at Fairbanks of selected commodities to their cost of transportation from points in the United States to Fairbanks, Alaska, 1947

Seattle, Washington, to Fairbanks, Alaska?

Commodity	The second second	ost ) pounds	Co. per tor		Percentage of retail price a Fairbanks			
	Carload	L.c.1.	Carload	L.c.l.	Carload	L.c.1		
	Dollars	Dollars	Cents	Cents	Percent	Percen		
Apples	4.52	5.61	6.0	7.4	18.1	22.4		
Butter	5.99	6.87	7.9	9.1	5.2	6.0		
Carrots	8.89	8.89	11.8	11.8				
Eggs	6.63	6.63	8.8	8.8	9.5	9.5		
Grapes	8.98	8.98	11.9	11.9				
Lemons	4.69	6.49	6.2	8.6	13.4	18.5		
Lettuce	8.90	8.90	11.8	11.8	14.8	14.8		
Milk	6.60	7.40	8.7	9:8	41.3	46.3		
Oranges	4.68	6.48	6.2	8.6	19.5	27.0		
Pork (fresh)	7.88	9.35	10.4	12.4	9.3	11.0		
Strawberries (frozen)	4.70	6.67	6.2	8.8	3.9	.5.6		
Tomatoes	8.95	8.95	11.9	11.9	13.8	13.8		
		Selected C	alifornia p	points to	Fairbanks'	,		
Grapes	10.26	10.26	9.1	9.1				
Lettuce <sup>5</sup>	10.38	10.38	8.0	8.0	17.3	17:3		
Tomatoes 5	10.33	10.33	8.0	8.0	15.9	15.9		

Costs include unloading, wherfage, and handling charges at Seattle, Wash., plus a 16 percent surcharge for these services, the ocean freight rate from Seattle, Wash., to Seward, Alaska, via the Alaska Steamship Lines, plus surcharge, charges for refrigeration or cool room service on steamers, marine insurance between Seattle and Seward plus surcharge, and war risk insurance currently in effect, unloading, handling, and wharfage charges at Seward, railroad rate from Seward to Fairbanks, and charges for protective services against heat and cold on Alaska Railroad from Seward to Fairbanks.

2Great circle mileage.

These costs include rail rates and protective service charges on carload shipments only from specified representative shipping points in California to Seattle (aubject to a 3 percent transportation tax on gross charges), plus the current transportation charges at carload and less-carload rates from Seattle, Wash., to Feirbanks, Alaska, for these commodities as shown in upper section of table.

4 Shipping point Fresno, Calif.

Shipping point &1 Centre, Calif.

Drawn from various sources.

all the furs produced in Alaska are taken during the late Fall and early Winter; in late Winter and early Spring the furs are shipped to Seattle where they are sold at the Seattle fur auction. As there is practically no market for the furs after this auction, few furs are shipped at later dates. Air transporta-

tion would extend the period by one to two weeks in which the furs could be shipped to reach the auction.

At present, there are two general air routes between the United States and Alaska, each of which possesses sufficient advantages virtually to insure its continued use. The oldest route and the

Table 3 - Furs shipped from Alaska during the years 1932 and 1939

	-1	932	19	939	
Type of fur	Number	Value	Number	Value	
	1,000	1,000	1.000	1,000	
	pelts	dollars	pelts	dollars	
Mink	43.2	245.8	42.9	418.1	
Red fox	10.4	113.7	21.3	160.2	
Blue fox	9.9	204.5	10.4	233.8	
Beaver	15.6	144.1	31,4	463.1	
Muskrat	500.6	180.2	417.4	342.3	
White fox	6.2	106.6	4.2	54.6	
Lynx	.5	23.3	2.7	101.4	
Marten	3.3	40.4	1.3	33.5	
Cross fox	1.1	24.2	2.3	31.9	
Silver-black fox	.9	39.7	.6	16.3	
Land otter	2.3	18.1	2.8	30.3	
Ermine	17.5	7.7	13.8	8.3	
Wolf	.3	5.7	.4	6.9	
Wolverine	.2	.8	.2	1.2	
Coyote	.2	.9	1.5	6.8	
Polar bear (pieces)	17	.3	37	.9	
Black bear (pieces)	251	.8	158	.3	
Hare (pieces)	153	.03	89	0	
Marmot (pieces)	157	.03	121	.03	
Squirrel (pieces)	205	.01	979	.08	
Annual value	\$1,1	156,870	\$1,5	10,900	

Source: "Alaska," published by United States Department of the Interior, Division of Territories and Island Possessions, 1945, 65 pp.

most commonly used has its southern terminal at Seattle and follows the western Canadian coast up to Alaska. The southern terminal of the other route is in the general vicinity of Minneapolis and goes inland across western Canada to Alaska.

Practically all of the United States trade with Alaska via surface transportation flows through Seattle and other Pacific Northwest ports. The dominant position occupied by Seattle, because of its proximity to the Territory, is a natural advantage that is likely to weigh heavily in favor of this area as a focal point for traffic in airborne commodities. But other factors favor the Pacific Northwest area as a center of, or transshipment point for, airborne freight. The Pacific Northwest produces much high-quality deciduous fruit, including cherries, apricots, and plums. They are good air candidates. This area normally produces also a surplus of dairy and poultry products, a part of which is now shipped to Alaska by surface transportation.

Another advantage held by the Pacific Northwest area that is likely to be important in connection with this type of air traffic is that it is the western terminus of several transcontinental airlines and railroads, in addition to being the northern terminus of the Pacific coast air and rail lines that connect the

ir



Typical silver fox farm in Alaska. A table accompanying this article shows that in 1939, nearly \$2,000,000 in furs were shipped to the United States from the Territory. The war hurt the market badly, but it is on the upswing again.

area directly with the winter-garden part of southern California. These facilities would enable the Seattle area to serve both as a transshipment and as a concentration point for north-bound freight on one hand, and for east and southbound freight on one hand, and for east and southbound freight on the other. This should make

it possible to supplement northbound shipments of deciduous fruits and dairy or poultry products from the Pacific Northwest with vegetables, citrus, and semi-tropical fruits from California. East and southbound shipments of Alaskan fish, furs, and other products from the Pacific Northwest could likewise be supplemented with locally pro-





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Table 4 - Summary of fresh and frozen products of Alaska fisheries,

Products	Weight	Value
	1,000 pounds	1,000 dollars
Salmon:		3.00
Fresh	1.344.0	202.4
Sharp frozen	10,821.2	1.477.3
Halibut:		-
Fresh	8,349.4	1.191.2
Frozen	19,001.7	2,673.9
Clama:		
Fresh	8.3	2.4
Frozen	203.3	65.7
Crabe:	- W. L. W. C. C. C.	100000000000000000000000000000000000000
Cold-packed	23.8	22.4
frozen meats	21.8	16.4
Whole in shell	9.9	1.1
Shrimp:	UT 14 100/2 10 100 10	1
Cold-packed	134.1	112.9
Frozen meats	6.5	5.5
Trout:		1390
Fresh	11.8	1.9
Frozen	-26.8	4.0
Fresh	544.9	58.2
Sharp frozen	4,619.3	514.5
Rock fishes:	4,019.3	314.3
Fresh	57.3	4.1
Sharp frozen	608.6	50.3
Flounders:		
Sharp frozen	28.5	1.6
Lingcod:	Server and the server	
Fresh	14.5	1.1
Sharp frozen	157.7	11.5
Sharks:		
Sharp frozen	58.7	6.4
Miscellaneous	9.2	1.4
Total	46.061.4	6, 427.

Alaska Fishery and Fur Seal Industries, 1944, Statistical Digest No. 13, U. S. Dept. of the Interior, Fish and Wildlife Service, Washington, D. C., 1946, 79 pp.

duced deciduous fruits and locally produced fishery products. These advantages would probably make it possible for air carriers engaged in this traffic to maintain relatively high load factors, which should, in turn, result in lower rates and greater frequency of service.

Other factors favorable to the Pacific Northwest as a focal point for trade between continental United States and Alaska in airborne perishables are somewhat less important. The first of these could probably be classified as an operational advantage. Flight distances between Seattle and Juneau and several other Alaskan cities are within optimum flight ranges of most types of planes now in use. The same is true of the route from Seattle to most Midwest cities, possibly making one stop en route. This advantage may become somewhat less important, however, as improvements in aircraft design and operations are made.

Another advantage of the Pacific Northwest route is the absence of customs procedures or the necessity of carrying the cargo in bond that would probably be required via the direct route across western Canada if one or more refueling stops were made in Canada. As such customs formalities seem complicated and are time-consuming, part

(Concluded on Page 38)



# THE GLOBAL TICKER

ARGENTINA: Recently released figures indicate a phenomenal rise in commercial air operations since 1944. Airlines flew an estimated total of 7,779,036 kilometers last year as against a total of 946,737 in 1944.

AUSTRALIA: Contrary to certain reports, there will be no immediate reduction in Australia-United States air services as the result of the Australian Government's ban on tourist and private travel to dollar areas. Business travel is permissible . . . The Lancastrians previously operated in passenger service by Qantas and BOAC (Sydney-London) will now be used for mail and freight only . . Existing runways at the Kingsford Smith Airport are to be scrapped.

BRITAIN: BOAC, biggest of Britain's three nationalized airlines, has reported a deficit of \$32,307,384 for the 12 months ended March 31, 1947. Causes given were multiciplicity of types of uneconomical aircraft with BOAC, had to use; delay in delivery of Tudors, with resultant change in plans; scattered and improvised maintenance bases; imperfect route organization; development work; services "in which the commercial considerations were often subordinated to the national interest"... BOAC's new New York-Bermuda service is operated on a thrice

weekly basis. Connie equipment is used...
Now it can be said that the United States nonsked, Aaxico, is not the only line in whose plane a baby was born. The same occurred in a BOAC plane over India. Mother was a Hindu evacuee... British-American Air Services, Ltd. has inaugurated operations from Bovingdon, England. Handley Page Halton equipment is used. Company is associated with Chartair, Ltd., Croydon... Another new charter outfit is World Air Freight Ltd., which also operates Haltons... New headquarters of British South American Airways are at Starways House, King Street, St. James', S.W.1, London. Freight office is on Albemarle Street.

CEYLON: L. S. B. Perera, director of civil aviation, has distributed a questionnaire among business men, aimed at determining the need for an air cargo service between Ceylon and other countries.

CYPRUS: Cyprus Airways has inaugurated direct runs between Cyprus and England. Stops are at Athens, Rome and Marseilles.

EIRE: For the second time in its 11-year history, Aer Lingus has increased its rates. Affected are routes from Dublin to London, Liverpool, Glasgow, and Manchester.

FRANCE: Air France's Latecoere 631, recently placed in service between Biscarosse, seaplane base near Bordeaux, and Fort de France, Martinique, is the largest passenger plane presently in use anywhere. It is capable of carrying more than 100 passengers. It is double-decked and has a speed of 186 miles an hour. No more than 46 passengers are permitted aboard in order to assure maximum comfort. Interior affords 15 cabins for two, four cabins for four, bar-equipped drawing room, individual folding tables, divan, and modern kitchen. Crew totals 14.

NETHERLANDS: Frequency of KLM's Amsterdam-New York service has been reduced from four to three a week... KLM's freight traffic shows by far the greatest percentage of increase in 1947 over the previous year—106 percent. Mail was up 32 percent and passengers four percent.

SWEDEN: ABA reports that delivery of its 10 ordered DC-6s will be held up until early Spring.

#### Permit Issued BSA

The Civil Aeronatics Board has issued a foreign air carrier permit to British South American Airways Corporation for the transportation of persons, property, and mail between Jamaica and Miami, via Nassau and Bermuda. BSA now operates from London to points in the Caribbean, South America, Bermuda, the West Coast of Africa. It also operates a local service between Caribbean points and points in the northern part of South America. It proposes to operate three round-trips weekly between Jamaica and Miami.



# AIR CARGO PROFILES ...



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[REG. U. S. PAT. OFF.]

## International Cargo and Mail Tables

OZ.

Air cargo rates quoted are from U. S. International airport of department (U. S. Gateway) and are based on the prevailing tariffs, airport to airport (see note). Shippers are warned, however, that these are subject to change.

#### **GATEWAY SYMBOLS**

GATEWAY SYMBOLS

An—Anchorage
Bb—Bangor, Me.
Bro—Brownsville, Tex.
Bw—Boston, Mass.
Ce—Corpus Christi, Tex.
Cg—Chicago
Cub—Cut Bank, Mont.
Di—Dallas
Do—Detroit
E0—E1 Paso
Fv—Fort Worth
Gf—Grand Forks, N. D.
Hu—Houston
Wa—Washington, D. C.

International Air Express is subject to two charges: one a charge per pound weight or measurement at carrier's option (200 cu. in. to the pound of weight), the other a charge per \$100 of valuation. The two must be added on any shipment to determine the cost. Neither includes insurance, which may be purchased by the shipper from the carrier or otherwise.

RATES (See Note)

All international rates are quoted on an airport-to-airport service, with the pickup and delivery charges apart. International air carriers whose sched-ules and rates are included here are in-dicated by the letter following the symbol for the airport.

#### AIRLINE SYMBOLS

AIRLINE SYMBOLS

A—American Alrilnes

AF—Air France

B—Braniff Airways

B—Braniff Airways

B—Braiff Airways

CS—Chicago & Southern Air Lines

CS—Chicago & Southern Air Lines

EA—Expreso Aereo Inter-Americano

K—KLM-Royal Dutch Airlines

N—National Airlines

N—Northeast Airlines

N—Northwest Airlines

N—Northwest Airlines

P—Pan American Airways System

and affiliates

P—Pan American Airways System

P—Pan American Airways

S—Sabena

S—Sabena

S—Sabena

S—Sandinavian Airlines

F—Trans-Canada Air Lines

T—Trans-Canada Air Lines

T—Trans-Canada Air Lines

T—Trans-Caranda Air Lines

W—Western Air

U—United Air Lines

W—Western Air Lines

RATES (See Note)

Per Lb. (Under 100 Lbs.) Per \$100 Value

1.31 1.48 1.34 1.34 1.77 1.75 1.86 2.19 1.94 1.89 1.54 1.64 1.58 1.28 1.72 1.67 1.67

.20 .20 .20 .20

.32 .32 .62 .50

1.60 1.71 2.05

Depart

Dly Dly Dly Dly ao, N.W.I.

Diy Diy Diy Diy Diy Diy Diy Diy Diy

Destination

Arica, (cont'd)

Aruba, N. W. I....

S. Gateway Airline

54

Bro P Lgs P Hu P Ce P

AIR TRANSPORTATION Pull Out and File

Destination

RATES (See Note)

Per Lb. (Under 100 Lbs.) Per \$100

200

H	Bayamo, Cuba	Mia P	.17	1	0	Dly .0	8
I	Belem, Brasil	Mia P Nyk P	1.03	.1	0 1	Twice Dly .1.	0
1		MiaTA	.89	.1	0	Frequently . 1	0
I	:	No P Bro P	1.28	.2	0	Dly 1	0
I	:	Lgs P Hu P	1.56	2	0	Dly 1	0
I	Belise, Br. Hond	Ce P MiaTA	1.33	.1	20		0
I		No TA Min P	.39	.3	2	T.F	0
I	Bello-Horizonte, Brazil	Nyk P	1.44	1.2	0	Dly 1	10
I	. :	No P Bro P	1.56	.2		Dly 1	10
۱	:	Les P Hu P	1.99	1.2	20	Dly 1	10
I	Dilmarkama Nice	Ce P NoTA	1.72	1.2	20	Die.	10
	Bilwaskarma, Nic	MiaTA	.63	1:		W,Sa	10
	Bluefield, Nicaragua	MiaTA No TA	.57			T,F	10
1	Bogota, Colombia	Mia P No P	1.08	1.1	10 20	I WICE DIY	10 10
	:	Bro P	1.11	1.5	20 20	Dly	10
		Hu P	1.19	1.3	20	Dly	10
	Bonaire, N. W. I	Ce P	1.14 via		20 rac	ao, N.W.I.	10
	Bonanza, Nicaragua.	Mia K Mia TA	.59		32	Diy	10
		No TA	.57	1		T,F	10
0	Bucaramanga, Colombia	No P	1.12		10 20	Su,M,Th,F	10
0	:	Bro P Lgs P	1.20		20 20	Su,M,Th,F Su,W,Th,Sa	10
0		Lgs P Hu P Ce P	1.48 1.28 1.28		20 20	Su,M,Th,F	10
Ó	Buenaventure, Col	Ce P Mia P No P	1.19	3 .	10	T,Th	10
0		Bro P	1.20	) [	20 20	F	10
0	:	Lga P Hu P	1.2	8 1.	20 20	Th	10
0	Ruenos Aires, Argentina	Ce P Mia P		3 1.	20	F Twice Dly	10
0	"Gende Aires, Argentin	Nyk P No P	1.6	4 .	20	Twice Dly Dly	10
0	:	Bro P	1.6	5 .	20	Dly	.10
0	:	Lgs P Hu P	1.7	3	20	Dly Dly	.1
0	Buenos Aires, Costa Rica	Ce P	1 6	8 ] .	.20	Dly	.1
ŏ		MiaT	.5	3	10	T,F W,Sa Dly	1
0	Calbarien, Cuba Call, Colombia	Mia F	0.6	1	.10	Dly	.1
0	:	No P Bro F	8		.10	Dly Dly	1
0	:	Les Hu H	1.0	5	.10	Dly Dly	.1
10		Ce I	9.9	2	.10	Dly	.1
0	Camaguey, Cubs Campeche, Mexico	Mia I	3	9	10	Five Dly Dly	.0
10	:	No I Bro I	.4	9	.10	Dly Dly	.0
10	:	Lgs		19	.10	Dly Dly	.0
10		Ce	3.	52	.10	Diy Su,W,Sa	.(
10	Campo Grande, Brazil	Mia l Nyk l	11.7	75	.20	1,1,00	.1
08 10 10	:	No I	P 1.6		.20	M,Th,F M,Th,F	.1
10	:	Lgs 1	P 2.1	15	.20	Su,W,Th M,Th,F	.1
10		Ce 1	P   1.6	33	.20	M,Th,F	.1
10 10	Canavieiras, Brazil	Nyk	P 1.	82	.20	Sa Th,Sa	
10	1	No Bro	P   1.	89	.20	Th Th	
10	1:	Hu	P 1.	99	.20	W	
10 10		Ce	P 1.	72	.20	Th	
10 10	Caracas, Venezuela (Se	La G	ea ira)				1.
10 10		Mia			.20	T.W.F.Sa.Sa	
10	Gararousa, Diagit	Nyk	P   1.	64	.20	Su,T,W,F,Sa	1
10 10	1 :	No Bro	P 1.	59 73 03	.20	Su,M,W,Th,F	1
10 10		Lgs	P 2.		.43	Su,T,W,Th,	
10	:	Hu Ce	P 1. P 1.	81 76	.43	T.W.F.Sa.Su Su.T.W.F.Sa S.M.W.Th.F Su.M.W.Th.F Su.T.W.Th. Sa Su.T.Th Su.T.Th	
10	H		-		. 20		1
10 10	Catacamas, Honduras	No T	TA :	47 50	1:::	T,F W,Sa	1

	- GWB	(See Note)		1,20
Destination	U. S. Gal	Per Lb. (Under 100 Lbs.) Per \$100 Value	Depart	Mail per
NOTE: Per pound the average package from New York to	e weighin Ontario	g 25 lbs., i.e., would cost \$1	1 lb. packa; or 25 lbs. \$	ge 4.
Average cost per it due if consignments The valuation char	s are ship	ped with declar	AOA is on	ly
applicable on ships per pound. For AOA.		nformation, co	ontact AA	

S. Gateway

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due if consignments a The valuation charge applicable on shipme per pound. For fur AOA.	shown nts with rther in	for All a valu formati	and uation on, o	AOA is only of over \$7.71 contact AA or	-	Aruba, N. W. I Asuncion, Paraguay	Mia K Mia P Nyk P No P	1111
It is suggested to pounds and over cen "British Overseas Ireland, to destination	tact the Airways as in Eng	Corp.	r for carrie Scotla	special rates. s from Foyhes, and, and Wales.		4 4	Bro P Lgs P Hu P	1 2 1 1
** Transportation carriage from termin airlines. † Canadian air expr air express within thexees charged at 10	ress is cone U. S.	. S. a	irline on the declar	s by European same basis as red value free:		Bahia, Brazil	Ce P No P Bro P Nyr P Mia P	111111111111111111111111111111111111111
LATIN A							Hu P Ce P Lgs P	1 1
(Mail rate to points	in Mexi	ee is o	nal	-ounce basis.)	- 1	Balboa, C. Z. (Panama	rigo r	
Altamira, Costa Rica	No TA	.56			.10	City)	Hu P Ce P	
Antigua, B.W.1	Mia TA Mia P	.45	.10		.10	4	No P Mia P	
	Nyk P	.56	.10		.10		No TA	
	No P Bro P	1.10	.10	Dly Dly	.10		MiaTA	
	Lgs P	1.35	.20		.10	Balboa, Canal Zone	Mia P	
4	Hu P	1.18	.20	Dly	.10	4	MiaTA	
*	Ce P	1.13	.20	Dly	.10		No P	1
Antilla, Cuba	Mia P	.20	.10	Dly	.08		NoTA	
Antofagasta, Chile	Mia P	1.19	.20	Dly	.10	1 :	Bro P	
	No P	1.35	.20	Dly	.10	1.4	Lgs P Hu P	
	Bro P	1.36	.20	Dly	.10		Ce P	
	Lgs P Hu P	1.51	.20	Dly	.10	Baracoa, Cuba	200	
	Ce P	1.41	.20	Dly	.10	Barcelona, Venesuela		
	NykPI	.97		Three Weekly	.10	a a	Nyk P No P	
Any Destination in Colombia other than	Wa PI	.96		Three Weekly			Bro P Lgs P Hu P	1
those named herein	Hu P	1.28	.20	Dly	.10	1 :	Ce P	
	Ce P	1.23	.20	Diy	.10	Barranca, Bermeja, Col.		
	No P Bro P	1.18	.20	Dly Dly	.10	Darranca, Dermeja, Col.	No P	1
	Mia P	.72	.10	Diy	.10		Bro P	
	Lgs P	1.49	20	Dly	10		Lgs P	
Aracaju, Brazil	Mia P	1.26	.20	Dly	.10		Hu P	1
a a a a a a a a a a a a a a a a a a a	Nyk P	1.54	.20	Dly	10		Ce P	
*	No P	1.53	.20	Dly	.10	Barranquilla, Colombia.	Mia K	
*	Bro P	1.60	.20	Dly	.10		Mia P	
1	Lgs P	1.90	.20	Dly	.10	H :	Bro P	
	Hu P	1.68	.20	Dly	.10		Lgs F	
Assessing Poss	Ce P Mia P	1.63	.20	Dly	.10		Hu F	1
Arequipa, Peru	No P	1.10	.20	Dly	.10		Ce I	
	Bro P	1.28	.20	Diy	10	Bauru, Brazil	Mia F	
	Lge P	1.46	.20	Div	10		Nyk F	P
	Hu P	1.33	.20	Dly	.10	11 •	Hu I	
	Ce P	1.30	.20	Dly	.10		Ce I	
Arica, Chile	Mia P	1.14	.20	Dly	.10	11	No I	
	No P	1.30	.20	Dly	.10		Bro I	

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	way	RAT (See N			705		Na. a	RATE (See N		8			way	RATI (See N	eta)	
Destination	U. S. Gate	Per Lb. (Under 100 Lbs.)	Per \$100 Value	Depart	Mail per 1/2	Destination	U. S. Gate	Per Lb. (Under 100 Lbs.)	Per 5100 Value	Depart S		Destination	U. S. Gate	Green.	Per \$100 Value	Depart
agena, Colombia	Mia P No P Bro P Lgs P Hu P	.47 .95 1.05 1.32 1.13	.10 .10 .10 .20 .20	Dly Dly Dly Dly Dly	.10 .10 .10 .10		Mia P Nyk P No P Bro P Lgs P Mia K	.42 .73 .93 .94 1.33	.20 .20 .20 .20 .20 .20	Dly .10 Dly .11 Dly .12 Dly .12 Dly .14 Dly .15 Dly .15 Dly .15	0	Ixtepee, (cont'd)  a a Joao Passoa (Cabadelio).	Lgs P Hu P Ce P Mia P	.81 .44 .39 1.25	.10 .10 .10 .20	Su,T,W,Th, Sa,M Dly Dly Sa Th
ago, Colombia	Ce P Mia P No P Bro P Les P Hu P	1.08 .64 1.03 1.06 1.33 1.14	.20 .10 .10 .10 .20	Dly Dly Dly Dly Dly Dly Dly	.10 .10 .10 .10 .10 .10	Curityba, Brazil	Hu P Ce P Mia P Nyk P No P	1.02 97 1.46 1.68 1.60	.20 .20 .20 .20 .20	Dly	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Nyk P No P Bro P Lgs P Hu P Ce P	1.47 1.49 1.55 1.82 1.63 1.58	.20 .20 .20 .20 .20 .20	Th W Th Th
nne, Fr. Guiana	Ce P Mia P Nyk P No P Bro P Lgs P Hu P	1.09 .78 .92 1.18 1.20 1.51 1.28	.20 .10 .20 .20 .20 .20 .20	Dly Diy Dly Dly Dly Dly Dly Dly Dly	.10 .10 .10 .10 .10	David, Panama	Bro P Lgs P Hu P Cc P Min P No P Bro P	1.75 2.06 1.83 1.78 .45 .58	.20 .20 .20 .20 .20 .20 .20 .20	Dly exe. T Diy exe. W Dly	0 0 0 0 0 0	Juticalpa, Honduras Kingston, Jamaica La Ceiba, Honduras La Esperenza, Honduras	No TA Mia TA Mia P Mia K Mia TA No TA Mia TA	.47 .50 .20 .20 .52 .47 .50	.10	T.F W,Sa Dly Dly W,Sa T.F W,Sa
	Ce P Mia P Mia P No P Bro P Lgs P Hu P	1.23 .22 .45	.20 .10 .10 .10 .10 .10	Diy Dly M,W,F M,W,F Su,T,Th M,W,Sa Su,T,Th	.10 .08 .05 .05 .05	Dulce Nombre, Hon	Lgs P Hu P Ce P No TA MiaTA Mia P No P	1.10 .68 .63 .49 .52 .78	.20 .20 .20 .20 .20	Dly .1 Dly .1 T,F .1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	La Guaira, Venezuela	Mia P Mia K Nyk P No P Bro P Les P	.47 .47 .77 .89 .90 1.30	.20 .20 .20 .20 .20 .20	Dly Dly Dly Dly
layo, Peru	Ce P Mia P No P Bro P Less P Hu P	.58 .90 1.09 1.10 1.34	.10 .10 .20 .20 .20	Su,T,Th Dly Dly Dly Dly Dly Dly	.05 .10 .10 .10	Esquias, Honduras	Bro P Lgs P Hu P Ce P No TA	1.00 1.22 1.08 1.05 .46	.20 .20 .20 .20 .20 .20	W,Sa .1 T,F .1 W,Sa .1 T,F .1	0 0 0	La Labor, Honduras	Hu P Ce P No TA MiaTA Mia P	.98 .93 .50 .53	.20 .20 .20 .20 .20	Dly Dly Dly T,F W,Sa M,T,W,F,Sa
uteca, Honduras	Ce P No TA MinTA Mia P No P Bro P	1.16 1.12 .46 .49 .47 .95 1.05	.20 .20 .10 .10	Dly T,F W,Sa Dly Dly Dly	.10 .10 .10 .10 .10 .10	Florianopolis, Brazil	MiaTA Mia P Nyk P No P Bro P Lgs P Hu P Cc P	1.48 1.70 1.64 1.79 2.08 1.87	.20 .20 .20 .20 .20 .20 .20	W,Sa, 1 W,F 1 Su,W 1 M,W 1 M,W 1 S,Th 1 M,W 1	0	La Paz, Bolivia	No P Bro P Lgs P Hu P Ce P No TA	1.31 1.32 1.49 1.37 1.35	.20 .20 .20 .20 .20	M,T,Th,F,So M,T,Th,F,So Su,M,W,Th,I Dly Dly T.F
fuegos, Cubs I Carmen, Mexico	Lgs P Hu P Ce P Mia P Mia P No P	1.32 1.13 1.08 .13 .43 .41	.20 .20 .20 .10 .10	Dly Dly Dly Dly Twice Dly Dly	.10 .10 .10 .08 .05	Fortaleza, Brasil (Ceara)	Mia P Nyk P No P Bro P	1.82 1.23 1.39 1.44 1.51 1.72	.20 .20 .20 .20 .20 .20 .20	M,W .1 Dly .1 Dly .1 Dly .1 Dly .1 Dly .1 L1 Dly .1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	La Union, Honduras  Lamani, Honduras  Las Canas, Costa Rica	MiaTA No TA MiaTA No TA MiaTA No TA	.49 .47 .50 .45 .48 .57		W,Sa T,F W,Sa T,F W,Sa T,F
ad Trujillo "D. R	Bro P Les P Hu P Cc P Mia P Nyk P Mia R	.44 .85 .52 .47 .31 .53	.10 .10 .10 .10 .10 .10	Dly Dly Dly Dly Twice Dly Dly	.05 .05 .05 .05 .10 .10	Georgetown, British Guiana	Lgs P Hu P Ce P Mia P Nyk P No P Bro P	1.59 1.54 .66 .80 1.08 1.09	.20 .20 .20 .20 .20 .20	Dly .1 Dly .1 Dly .1 Dly .1	10	Las Juntas, Costa Rica Liberia, Costa Rica Libertad, Nicaragua	MiaTA No TA MiaTA No TA MiaTA MiaTA No TA	.53 .56 .52 .58 .54 .54		W,Sa T,F W,Sa T,F W,Sa W,Sa T,F
ad Victoria Tamps.	DI B Fv B Lo B Sa B Bro P Hu P Cc P	.30 .30 .16 .23 .20 .28	.10 .10 .10 .10 .10 .10	Dly Dly Dly Dly Dly Dly Dly Dly Dly	.05 .05 .05 .05 .05 .05	Golfito, Costa Rica	Hu P Ce P MiaTA No TA No TA MiaTA	1.46 1.17 1.13 .54 .58 .48 .51	.20 .20 .20	Dly .1 Dly .1 Dly .1 T,F .1 T,F .1	10 10 10 10 10 10	Lima, Peru	Mia P No P Bro P Lgs P Hu P Cc P	.99 1.16 1.17 1.39 1.23 1.21	.20 .20 .20 .20 .20 .20	Diy Dly Dly Dly Dly Dly
abamba, Bolivia	Mia P No P Bro P Lgs P Hu P Ce P	1.19 1.35 1.36 1.51 1.41	.20 .20 .20 .20 .20 .20	M,W,Sa Su,T,F Su,T,F M,Th,Sa Su,T,F Su,T,F	10 10 10 10 .10 .10	Guadalajara, Mexico	Bro P Les P Hu P Ce P Mia P Mia P	.87 .59 .45 .40 .20	.10 .10 .10 .10 .10 .20	Dly .0 Dly .0 Dly .0 Twice Dly .0	)5 )8 )5 )5	Limon, Costa Rica Loja, Ecuador	NykPI Wa PI Mia TA Mia P No P	.88 .84 .64	 .20 .20 .20	Three Weekl Three Weekl Frequently T
mbia. Any Desti- tion other than ose named herein	Hu P Ce P No P Bro P	1.28 1.23 1.18	.20 .20 .20 .20	Dly Dly Dly Dly	.10 .10 .10		MiaTA No TA No P Bro P Les P Hu P	.39	.20 .20 .20 .20 .20 .20 .20 .20 .20	W,Sa T,F Twice Dly Twice Dly Dly 1	10	Los Chiles, Costa Rica.	Bro P Les P Hu P Ce P	1.12 1.36 1.20	.20 .20 .20 .20 .20	M Bu M M
ayagua, Honduras	Min P Lgs P No TA Min TA Min P No P Bro P Lgs P Hu P	.72 1.49 .46 .49 1.27 1.41	.20 .20 .20 .20 .20 .20	Dly Dly T,F W,Sa Se F F	.10 .10 .10 .10 .10 .10 .10	Guayape, Honduras Guayaquil, Ecuador	Ce P No TA MiaTA Mia P No P Bro P Les P Hu P	.76 .99	.20 .20 .20 .20 .20 .20 .20 .20 .20 .10	2 Dly .1. T.F .1. W,Sa .1. Dly	10 10 10 10 10 10 10	Maceio, Brasil	MiaTA Mia P Nyk P No P Bro P Lgs P Hu P Ce P	1 26 1 52 1 51 1 56 1 86 1 64	.20 .20 .20 .20 .20 .20 .20 .20	W,Sa Dly Dly Dly Dly Dly Dly Dly
obs, Argentins	Ce P Mia P No P Bro P Lgs P Hu P	1.50 1.37 1.48	.20 .20 .20 .20 .20 .20 .20	F F Dly Dly Dly Dly Dy	.10 .10 .10 .10 .10 .10	Havana, Cuba	Cc P Min P Min EA Min TA Min N Tm N Nyk N No C8	08	.10	Dly Company Co	10 08 08 08 08 08 08	Magangue, Colombia	Mia P No P Bro P Lgs P Hu P	.52 1.02 1.12 1.39 1.20 1.15	.20 .20 .20 .20 .20 .20	Su,T,F Su,M,F Su,M,F Su,Th,Sa Su,M,F Su,M,F
Venezuela	Mia P Nyk P No P Bro P Lgs P Hu P	.48 .82 .84 .85 1.30	.20 32 .32 .32 .32 .43 .43	Dly Dly Dly Dly Dly Dly Dly Dly	.10 .10 .10 .10 .10 .10	Holguin, Cuba Honda, Colombia	Mia P Mia P No P Bro P Les P	1 1 17	.10 .15 .10 .10 .10 .20 .20	Dly Dly Dly Dly Dly Dly Dly Dly	08 08 10 10 10 10	Managua, Nicaragua	Mia P Mia TA No TA No P Bro P Lgs P Hu P	.50 .48 .48 .50 .66	.20 .20 .20 .20 .20 .20 .20	Dly Dly W,Sa Twice Dly Twice Dly Dly 2 Dly
uin, Honduras mba, Brasil	Cc P No TA Mia TA Mia P No P Bro P Lgs P	1.36 1.48 1.50	.20 .20 .20 .20	Dly T,F W,Sa Su,W M,F M,F	.10 .10 .10 .10 .10 .10	Iguassu Falls, Brazil	Cc P Mia P Nyk P No P Bro P	1.46 1.25 1.20 1.51 1.75 1.69 1.84 2.14 1.92	.10 .20 .20 .20 .20 .20 .20 .20 .20 .20 .2	Dly Su,T Su,T Su,F Su,F	10 10 10 10 10 10 10	Manaos, Brasil	Ce P Mia P Nyk P No P Bro P Lgs P Hu P	1.44	.20 .20 .20 .20 .20 .20 .20 .20 .20 .20	Su,W,Th Su,W,T M,T,F M,T,F S,M,Th W,F,Sa
uta, Colombia	Hu P Ce P Mia P Ne P Bro P Les P	1.58 1.53 60 1.12 1.20 1.49	.20 .20 .20 .20 .20	Dly Dly Dly Dly	.10 .10 .10 .10 .10	Ipiales, Colombia	Lge P Hu P Ce P Mia P No P Bro P Lge P Hu P	1.87 .72 1.12 1.15	.20 .20 .20 .20 .20 .20	Su,F Su,F Dly Dly Dly Dly	10 10 10 10 10	Manisales, Colombia	Ce P Mia P No P Bro P Lgs P Hu F	1.57 .65 1.04 1.07 1.34 1.15	.20 .20 .20 .20 .20 .20	W,F,Sa Dly
mea, Ecuador	Hu P Ce P Mia P No P Bro P Lgs P	1.28 1.23 .78 1.02 1.08 1.22	.20 .20 .20 .20 .20 .20 .20 .20	Dly Dly M,Su,W,F Su,T,Th,Sa Su,T,Th,Sa Su,T,Th,Sa	.10 .10 .10 .10 .10	Ixtepec, Mexico	Hu P Ce P Mia P	1.18	.20 .20 .10	Dly M.T.W.Th, F.Su Su,T.W.Th,	10 10 05 05	Manta, Ecuador	Ce F Mia F No F Bro F Lgs F Hu F	.80 1.02 1.03	.20 .20 .20 .20 .20 .20 .20 .20 .20 .20	Dly M,Th,Sa Su,W,F Su,W,F Tu,Th,Sa M,F

	eway	RAT (See f			1/2 Oz.		eway.	RATE (See N			1/2 Oz.		eway.	RATE (See No		
Destination	U. S. Gat	Per Lb. (Under 100 Lbs.)	Per \$100 Value	Depart	Mail per 3	Destination	U. S. Gate	Per Lb. (Under 100 Lbs.)	Per \$100 Value	Depart	Mail per 3	Destination	U. S. Gate	Per Lb. 100 Lbs.)	Value	Depart
lanto, Honduras	No TA MiaTA	.47		T,F W,Sa	.10	Nuevo Laredo, Mexico	D1 B Fv B Sa B		.17	Dly Dly	.05	Puntarenas, Costa Rica	MiaTA No TA	.51		W,Sa T,F
ansanillo, Cuba	Mia P		.10	Dly	.08	:	Lo B	.22 .22 .15 .08 .71	.15	Dly Dly	.05	Quibdo, Colombia	Mia P No P	1.14	.10	9u F
faracaiho, Venezuela	Mia P Mia K	.44	.20	Dly Dly	.10	Oaxaca, Mexico	Mia P No P	.71	.10	Dly except Sa Dly except F	.05	:	Bro P	1.19	.20	Th
:	No P Bro P	.81	.20	Dly Dly Dly	.10	:	Bro P	30	.10	Dly except Sa. Dly except F	.05 .05 .05	:	Lgs P Hu P Ce P	1.27	20	Sa Sa
	Lgs P Hu F	1.27	.20	Dly Dly	.10	:	Lgs P Hu P Ce P	.38	.10	Dly	.05	Quito, Ecuador	Mia P	.74 .98 .99	.10	Dly
4 faccale Wandanan	Ce I	.85	.20	Dly	.10	Olanchito, Honduras	MiaTA	.52	.10	Dly W,Sa	.10		Bro P	.99	.20	Dly Dly
farcala, Honduras	MiaT	A49	***	T,F W,Sa T,F	.10	Orica, Honduras	No TA MiaTA	.49		T,F W,Sa	.10		Lgs P Hu P Ce P	1.18	.20	Dly Dly
fatagalpa, Nicaragua.	No TA	A 53		W,Sa	.10	Oruro, Bolivia	No TA Mia P	1.24	.43	T,F M,T,W,F,Sa	.10	Recife (Pernambuco)	Ce P	1.03		Dly
aturin, Veneruela	Mia I Nyk I	.56	.20	Dly Dly	.10		Mia P No P Bro P Lgs P Hu P Ce P	1.24 1.33 1.33 1.55 1.41	.43	M,T,W,F,Sa M,T,Th,F,Sa M,T,Th,F,Sa S,M,W,Th,F	.10	Brazil	Mia P Nyk P	1.26	.20	Dly Dly
:	No I Bro I	.97	.20	Dly	.10		Lgs P	1.55	.43	S.M.W.Th,F	.10	:	No P Bro P	1.50	.20	Dly Dly
:	Lgs H	1.88	.20	Dly Dly Dly Dly	.10	Palmar, Costa Rica	Ce P MiaTA	1.36	.43	Dly W,Sa	.10	:	Lgs P Hu P	1.84	.20	Dly Dly
asatlan, Mexico	Ce I Bro I	1.02	.20	Dly	.10	4	No TA	.57	***	T,F	.10	Die de Teneire	Ce P Mia P	1.59	.20	Dly Dly
assemu, Mexico	Lgs H	.45	.20	Dly Dly	.05	Panama City, Panama	Mia P	.64	.10	Twice Dly Dly	.10	Rio de Janeiro	Nyk P		.20	Dly
•	Cc 1	.55	.20	Dly Dly	.05		Bro P Lgs P Hu P	1.15	.10	Twice Dly Dly 2 Dly	.10		No P Bro P		.20	Dly Dly
fayajiga, Cuba fedellin, Colombia	Mia I	.13	.10	Dly	.08	:	Hu P		.10	2 Dly 2 Dly	.10	:	Lgs P Hu P	1.68	.20	Dly Dly
	No 1	1.02	.20	Dly Dly	.10	Para, Brazil (See Belem) Paramaribo, Sur	Mia F		.10	Dly	.10	Robore, Bolivia	Ce P Mia P	1 64	.20	Diy
:	Les 1	P 1.35	.20	Dly	.10	8 8	Mia K Nyk P	73	.43	T, F	.10	4	No P Bro P	1.44	.20	Sa F
4	Ce ]	P 1 00	.20	Dly Dly	.10		No I	1.14	.10	Diy	.10		Lgs P	1.58		Th
Merida, Mexico	No 1	P .25 P .22 P .53 P .92	.10	Twice Dly Twice Dly	.05 .05 05		Bro H	1.48	.20 .20 .20 .20	Dly Dly	.10		Hu P	1.46	.20	F _
:		P .53	.10	Dly Dly	.05		Hu H	1.23	.20	Dly Dly	.10	Ruinas de Capon, Hond.	No TA MiaTA	.53		T.F W.Sa
	DI I			Dly	.05	Parnahyba, Brazil	Mia I	1.19	.20	Sa	.10	Salama, Honduras	No TA MiaTA	.47		T.F W.Sa
:	Fv 1	B .50	.32	Dly Dly	.05 .05 .05	4	Nyk I No I	1.33	.20	Sa,T Th,Su	.10	Salinas, Ecuador	Mia P No P	.78	.10	Th,Sa W,F
*	Sa Hu	B .49	.32	Dly	.05	*:	Bro I	1.48	.20	Th.Su W.Sa	.10	:	Bro P	1.03	.20	W.F
*			1.10	Dly	.05		Lgs l Hu	1.56	.20	Su, Th	.10		Hu P	1.22	.20	T.Th W.F
Mexicall, Mexico Mexico City, Mexico	Mia	P .12	.10	Twice Dly	.05	Parrita, Costa Rica	-Ce F MiaT		.20	Su,Th W,Sa	.10	Salta, Argentina	Cc P Mia P		20	W,F Su,T,F
*	No Di Di	P .6	.10		.05	Pasto, Colombia	No Ta Mia	.55	.10	W,Sa T,F Dly	.10		No P Bro P	1.42	20	M,Th,Sa M,Th,Sa
*	Di :	A .20	.15	Dly	.05	Tasto, Colombia	No I	1.15		Dly	.10	:	Lgs H	1.55	.20	Su, W, F
	Lo	A .31 B .24 B .30	.15	Dly	.05 .05 .05 .05 .05		Bro I Les I Hu	1.45	.20	Dly	.10		Co I		.20	M,Th,Sa M,Th,Sa
	Lgs Lo Fy Fy	B .3(A .2(A .3) B .24 B .3(A .2) A .22 A .11 B .3(A .6) A .6	1.17	Dly Dly	.05		Hu Ce	P 1.26 P 1.21	.20 .20 .20 .20	Dly	.10	San Estaban, Honduras.	NoTA	.50	32	T,F
:	Eo .	A .2	.15	Dly	.05	Pereira, Colombia	Mia I	.64 1.03	.10	Dly Dly	.10	San Fran. de la Paz,	MiaT	A .53	.20	Diy
:	Sa I	A .1	1.17	Dly	.05	:	Bro 1	1.06	.10	Dly	.10	Ho/duras	No TA		.32	T,F
4	MiaT No T		1	Dly W,Sa	.05		Lgs   Hu	P 1.33 P 1.14	.20	Dly Dly	.10	San Ignacio, Bolivia	MiaT.	1.28	20	Dly Sa F
Minatitlan, Mexico	Mia No	P .5	.10	Dly	.05	Popayan, Colombia		P 1.09	.20	Dly	.10	:	No I Bro I	1.41	.20	F
	Bro	P 3	1.10	Dly	.05		No	P 1.03 P 1.06	.10	DIV	.10	:	Lgs I Hu I	1.55	.20	Th
:	Hu	P .4	.10	Dy	.05	1:	Lgs Hu	P 1.33	.20	Dly Dly	.10		Ce I		.20	F
Montego Bay, Jamaica.	Ce Mia	P .3			.05		Ce	P   1.09	.20	Dly Dly	.10	San Isidro, Costa Rica	No T			T,F
Monteria, Colombia	Mia	P .5	1 10	Div	.10	Port au Prince, Haiti	Mia Mia	P .25	.10	Dly T,F	.10		MiaT	A .51		W,Sa
:	No	P 1.0 P 1.1	3 .10 3 .10 3 .20 0 .20 1 .20 3 .20	Diy	.10		Nyk	P .63	.10	Dly	.10	San Jose, Bolivia	Mia I	P 1.31 1.43	.20	Sa F
:	Lgs	P 1.4 P 1.2	.20	Dly	.10	Port of Spain, Trinidad	Mia	P .56	.10	Dly	.10	:	Bro 1	1.44	1.20	F
	Ce	P 1.4 P 1.2 P 1.1	3 .20	Dly Dly Dly Dly Dly Dly Dly	.10		Mia l Nyk	P   .70	1.10	Dly Dly	.10	:	Hu I	1.48	.20	Th F
Monterrey, Mexico			.15		.05	:	No Bro	PI .99	.20	Dly	.10	San Jose, Costa Rica	Ce Mia	P 1.46	.20	F,Sa Dly
:	Fv Dl	A .1 B .2 B .2	.15 7 .17 7 .17	Dly	.05	:	Lgs Hu	P   1.41	.20	Dly Dly	.10		Mia I		.32	W,Sa M,F
	I ICo	A .1	.15	Dly Dly Dly Dly Dly Dly	.05		Cc	P 1 42	.20 .20 .20 .20 .20 .20 .20 .20 .20 .20	Diy	.10		No T.	A .54 P .54		M,F T,F Dly
:	Lgs Lo Sa Sa Mia	A .8 B .1 A .0 B .2 P 1.5	3	Dly	1.05	Porto Alegre, Brasil	Mia Nyk	P 1.52	.20	Dly Dly	.10	:	Bro !	P .56	.10	Twice Dly
	Sa	A .0 B .2	1.18	Dly	.05 .05 .10		No Bro	P 1.69 P 1.80	.20	Dly Dly	.10		Hu	P .72 P .64	1.10	Dly Dly
Montevideo, Uruguay.	Mia Nyk	P 1.5 P 1.6	2 .20	Dly	.10	1.	Bro Lga Hu Cc	P 2.14 P 1.88	.20	Dly Dly	.10	San Juan, Puerto Rico.	. Ce	P .36	.10	2 Dly Thrice Dly
:	No	P 1.6	.20	Dly	.10		Ce Mia	P 1.88 P 1.83 Fa .67	.20	Dly Frequently	.10		Nyk	P .36	.10	Dly
:	Lgs	P 1.9	3 .20	Dly Dly Dly	.10	4	NoT.	A .65	.20	T,F	.10	San Marcos de Colon,	Me m	A 40		TP
	Ce	P   1.7	1 .20	Dly	.10	Costa Rica	No T	A .58		T.F W,Sa	.10	Honduras	No T. Mia T	A .46 A .49		T.F W,Sa
Mossoro, Brazil		P 1.2 P 1.4	1 .20	T T Su Su Su Sa Su	.10	Preston, Cuba	Mia7 Mia	A .54 P .20	.10	Dly	.10	San Marcos Octopeque Honduras	NoT	A .50		
	No	P 1.4	8 .20	Su	.10	Progresso, Honduras	No T	A .49		Dly T,F W,Sa	.10	San Pedro, Sula, Hond.	No T Mia T Mia T	A .53		T,F W,Sa W.Sa
:	Les	P 1.7	6 .20	Sa	.10	Puebla, Puebla	Dl	B .41	1.17	Dly	.08		No T	A .48		W,Sa T,F
	Ce	P 1.6	6 .20	8u	.10		Dl Fu Lo Sa	B .41 B .27 B .34	.17 .17	Dly Dly Dly	.08	San Salvador, El Salvador	. Mia	P .42	.10	Dly
Nassau, Bahamas	Min			-	.10		Sa	В .34	.17		.08		Bro	P .42 P .39 P .41	.10	Twice Dly
Natal, Brazil					.10	Puerto Cahezas, Nic	No T	A .61		T,F W,Sa T,F	.10	:	Les	P .50 P .50 P .44 A .48	.10	Dly
a season of a season of	Mia Nyk	P   1.4	5 .20	Dly	.10	Puerto Cortez, Hond	. No T	A .49		TF	.10	Santa Parkers W.	Ce	P .44	.10	Dly Dly Dly T,F
	Bro	P 1.4	4 .20	Dly	.10	Puerto Jimines, C. R	Mia No T	A .58		W,Sa T,F	.10	Santa Barbara, Hond	No T Mial	AI DI		. W,Sa
:	Lgs Hu	P 1.4 P 1.8 P 1.8 P 1.6 P 1.8	5 .20 5 .20 8 .20 4 .20 0 .20 2 .20 7 .20	Dly Dly Dly T,F W,Sa	.10		Mia?	A .54		W.Sa T.F W.Sa Sa F	.10	Santa Clara, Cuba Santa Cruz, Bolivia	. Mia	P .13	.10	
Nicora Carta Bian	Ce	P   1.0	7 .20	Diy	1.10		Mia	A .51		W,Sa	.10	4	No	P 1.38	.20	Su,T,F Su,T,F M,Th,Sa
Nicoya, Costa Rica	No T Mia		3	W,Sa	.10	Puerto Suares, Belivia.	No No	P 1.44	.43	F	.10		Lgs Hu	P 1.53	.20 .20 .20 .20 .20	M,Th,Sa
Nueva Gerona (Isle of Pines), Cuba	. Min I	L AS	4 .18		.08		Bro Las Hu	P 1.45 P 1.58 P 1.49	.43 .43 .43 .43	F	.10			P   1.41	.20	Su,T,F
Nueva Ocotepeque, Hor		A	0 1 20	T TP	.10	III #	Ha	TO 1 4 40	1 40	F	.10	Santa Crus, Costa Rica		A .58		T,F

	ABMI	RATES (See Not			1/2 OE				way	RATE (See No			1% Or.	ATLANTIC	ROU	TES-	-Cor	tinued
Destination	U. S. Gatev	Curder 100 Lbs.)	Value	Depart	Mail per 1/5	D	estination		U. S. Gatev	2	\$100	Deport	Mail per 1/4		anteway ne	RAT (See A	lote)	
sta Marta, Colombia.	Mia P No P Bro P Lgs P Hu P	.48 .96 1 .06 1 .33 1 .14	10 10 10 20 20	Dly Dly Dly Dly Dly	.10 10 .10 .10	Turtia,	Gutierrez, M	Mex. N. N. B. L. E.	Mia P No P Bro P Les P Hu P	.62 .59 .42 .83	.10 .10 .10 .10	Dly except Sa Dly except F Dly except Sa Dly except F Dly	.05 .05 .05 .05	Destination  Bangkok, (cont'd)	Bw P Wa P	2 58 2 65 2 65	.20 .20	W,Sa W,Sa
a Rosa de Copan, onduras	No TA MiaTA Mia P No P Bro P Les P Hu P	1.09 49 52 1.30 1.46 1.60 1.50	20 20 20 20 20 20 20 20	Dly T.F W.Sa Dly Dly Dly Dly Dly Dly	.10 10 .10 .10 .10 .10	Uyuni, I	Bolivia	N	Min P No P Bro P Lgs P Hu P Co P Min P	1.22 1.36	.10 .20 .20 .20 .20 .20 .20 .20	Dly T.F M.Th M.Th Su.W M.Th M.Th Dly	.10 .10 .10 .10 .10 .10 .10	**Barcelona, Spain. Basie, Switzerland  Basrah, Iraq Bastia, Corsica Beirut, Lebanon	NykBO Nyk K Nyk S NykSS NykAF NykBO NykAF NykAF	1.73 1.35 1.36 1.68 2.55 1.99 1.40 2.29	.25 .25 .25 .25	Su,W,Sa T,Th,Sa,M W,Sa Sa,M,T,W,F
iago, Cuba Luis, Brazil	Cc P NykPI Wa PI Mia P Mia P Nyk P No P Bro P Lan P	.99 .98 .18 .16 .129 .138 .1.43 .1.62	10 20 20 20 20 20 20	Dly Three Weekly Three Weekly Thrice Dly Dly Dly Dly Dly Dly Dly	.10 .10 .08 .10 .10 .10 .10		ia, Mexico	I I I	Mia P No P Bro P Les P DI B Fv B Lo B Sa B	.42 .42 .28 .35	.32 .32 .17 .32 .32 .32 .17 .17	Dly	.05 .05 .05 .05 .05 .05 .05	**Belfast, N. Ireland **Belgrade, Yugoslavis. Benghasi, Libya. Bergen, Norway. Berlin, Germany.	NykBO NykAO NykAF NykSS NykAO Wa AO Ph AO NykBO	1 82 1 13 1 168 1 191 1 133 1 144 1 148 1 146 1 144	.25 .25 .25 .25 .25 .25 .25	Dly Su,W,Sa Sa,M,T,W,F M,F F
Paolo, Brasil	Hu P Cc P Mia P Nyk P No P Bro P Lgs P Hu P Cc P	1.51 1.46 1.32 1.42 1.56 1.67 1.90 1.75	20 20 20 20 20 20 20 20 20 20 20 20	Dly Dly Twice Dly Dly Dly Dly Dly Dly Dly Dly Dly	.10 .10 .10 .10 .10 .10 .10 .10		a, Brasil	1	Hu P Ce P Min P Nyk P No P Bro P Les P Hu P Ce P	.36 .31 1.41 1.66 1.59 1.73 2.03	.17 .17 .20 .20 .20 .20 .20 .20 .20	Dly Dly Sa Th.Sa Th W Th	.05 .10 .10 .10 .10 .10 .10	Bone, Algeria Bordeaux, France Bombay, India  Bordeaux, France Bowen, Australia Bowen, Australia Brazzaville, Fr. Eq. Af.	Nyk AF Nyk AF Nyk TW Wa TW Ph TW NykBO NykBO NykBO NykAF	7 1.55 7 1.32 7 2.47 8 2.52 7 2.50 0 2.47 0 1.35 0 3.38 F 2.92		Thrice Wkly Thrice Wkly Su,W,Th,Sa Sa Sa
Salvador, Brazil ahia)	Min P Nyk P No P Bro P Lan P Hu P Ce P	1.28 1.58 1.54 1.64 1.94 1.72 1.67	20 20 20 20 20 20 20 20	Dly	.10 .10 .10 .10 .10 .10	Cuba	a de las Tunas	MS,	Mia P Mia P No P Bro P Lgs P Hu P	.15 .47 .43 40 .83 .48	.10 .10 .10 .10 .10	Dly Dly Dly Dly Dly Dly	.08 .05 .05 .05 .05 .05	Brussels, Belgium	Nyk P Bw P Wa P Nyk SS Nyk AF Nyk AC Nyk B Nyk BC	1 .26 1 .24 1 .30 S 1 .65 F 1 .30 1 .33 K 1 .31	.25	Dly Su,F M Sa,M,T,W,F Su,W,Sa T,Th,Sa,M
chns, B. W. I	Bro P Mia P Nyk P Hu P Ce P Lgs P Mia K Mia P	1.10 .45 .56 1.18 1.13 1.35 .71	32 43 32 32 43 43 43 22 32	Sa Dly	.10 .10 .10 .10 .10 .10 .10		cencio, Col		Mia P No P Bro P Les P Hu P Ce P	.65 1.12 1.15 1.42 1.23 1.18	.10 .20 .20 .20 .20 .20 .20	Dly Dly Dly Dly Dly Dly Dly Dly T,F	.10 .10 .10 .10 .10 .10	**Bucharest, Rumania. Bulawayo, S. Rhodesia Cairo, Egypt.	Nyk S NykAC NykBC NykBC NykTW Wa TW Bw TW Ph TW Cg TW	O 1.83 O 2.90 O 2.57 V 1.86 V 1.90 V 1.83 V 1.88 V 1.98	25 25 25 25 25 25 25 25 25	W,Sa Su,W,Sa T,F Dly M,Sa M,F M,Sa Sa
Martin, N.W.I	Nyk P No P Bro P Les P Hu P Ce P Mia K Mia P	1.00 1.07 1.39 1.15 1.10 68	32 32 43 43 43 43 23 32	T.Th,Sa Dly exe. Sa Dly exe. Sa Dly exe. Sa Dly Dly Dly Sa Twice Dly	.10 .10 .10 .10 .10 .10 .10	Waspan	n, Nicaragua.		MiaTA No TA MiaTA No TA MiaTA	.53 .60 .62 .47	.20 .32 .20 .32 .20	Diy T.F Diy T.F Diy	.10 .10 .10 .10 .10	Calcutta, India	NykAI NykB( Nyk S Nyk P Bw P Wa P NykB(	V 1.92 F 2.18 O 1.76 S 1.84 P 2.45 P 2.43 P 2.50 O 2.45	25 20 20 20 20	W,Sa W,Sa
a Nicaragua	Nyk P No TA MiaTA MiaTA No TA No TA	.51 .46 .49 .58 .56	.32	Dly T,F W,Sa W,Sa T,F	.0 <b>5</b> .10 .10 .10 .10	Aarhus,	g, Denmark , Denmark Gold Coast		Nyk88 Nyk88 Nyk P	S 1.44 2.32	.25 .15 .20	Sa,M,T,W,F Sa,M,T,W,F M,Th	.15 .15 .25	Capetown, U. of S. Af Casablanca, Morocco Cawnpore, India **Christiansand, Nwy	NykB( NykAl NykB( NykB( NykA(	O 3.21 F 1.64 O 1.54 O 2.47 O 1.47	.25	Su
ara, Peru	MiaTA Mia P No P Bro P Lgs P Hu P Ce P Bro P	.53	.10 .20 .20 .20 .20	W.Sa Dly Dly Dly Dly Dly Dly	.10 .10 .10 .10 .10	Aden.	Ababa, Ethiop	pia.	NykBO Bw P Wa P NykBO NykAF NykBO	2.03 2.29 2.36 2.13 F 2.97 0 2.20	.20 .20 .25	M,Th M,Th Thrice Wkly	.25 .25 .25 .25 .25 .25	Cochin, India	Nyk BO Nyk AO Nyk I Nyk BO Nyk S	O 2.53 O 1.40 K 1.40 O 1.45 S 1.40	25 25 25 25	T, Sa W.Sa
pice, Mexico	Ce P Bro P Lgs P Hu P Ce P Mia P	.76 .15 .13	.10 .10 .10 .10	Diy Diy Diy Diy Diy Diy Diy	.10 .05 .05 .05 .05	Ahmed Ajaccio Ajadir, Alexand Algiera	Hoe, Fr. W. A labad, India b, Fr. Corsica Morocco dria, Egypt dria, Algeria	Afr	NykAF NykBO NykAF NykAF NykBO NykTW	F 2.01 O 2.38 F 1.40 F 1.69 O 1.80 V 1.51	.25	Thrice Wkly Thrice Wkly Thrice Wkly Th	.25 .25 .25 .25 .25 .25 .25	Costermansville, Belgian Congo Dakar, Senegal, Africa.	Nyk S Nyk S Nyk I Bw I Nyk A	P 1.80 P 1.77	20 .20	T,F M,Th
	No P Bro P Lgs P Hu P Ce P Mis P	.89 .34 .88 .42 .37	.10 .10 .10 .10 .10	Diy Diy Diy Diy Dly Dly	.05 .05 .05 .05 .05	Allahar	bad, India dam, Netherl	lands	NykBO	0 2.49 0 1.29 F 1.34 S 1.61 1.29	.25	Su, W Thrice Wkly Sa, M, T, W, F T, Th, Sa	.25 .15 .15 .15 .15	Damascus, Syria	NykA Nyk I Bw I Wa I	F 2.26 P 1.78 P 1.76	8   .20 8   .20 2   .20	M,W,Th
engalpa, Honduras .	Mia TA No TA Bro P Les P Hu P Ce P	.47 .44 .44	.10 .10 .10 .10 .10 .10	Diy Diy W, Sa Diy Diy Diy Diy	.10 .10 .10 .10 .10 .10		werp, Belgium		Nyk S Nyk P Bw P Wa P Nyk AF Nyk BC Nyk AC	2.01 1.98 2.05 F 2.48 0 2.00 0 1.26	.25 .25 .25 .20 .20 .20 .20	W,Sa F Sa Sa Thrice Wkly	.15 .15 .15 .15 .15	Dar-es-Salaam, Tanganyika  Darwin, Australia  Deauville, France  Delhi, India	NykB NykB NykB NykB NykB NykB	F 3.45 O 2.59 O 3.16 O 1.20 S 1.31 O 2.86	7 9 8 8  8 1	
Honduras pisque, Costa Rica	MiaTA No TA No TA MiaTA No TA MiaTA	A .52 49 58 A .54 51 A .54		W,Sa T,F T,F W,Sa T,F W,Sa	.10 .10 .10 .10 .10	Atar, F	Morocco a, Ethiopia Pr W. Africa.		NykAI NykAI NykBC NykAI NykTW	F 1.69 F 2.72 O 2.07 F 2.10 W 1.73	.25	Su,M,T F,Sa	.15 .15 .25 .15 .15	Dharhan, Saudi Arabia.  Dire Davona, Ethiopia. Dijiboati, Fr. Somaliland	Wa TV Ph TV NykTV NykA	W 2.50 W 2.40 W 2.40 F 2.80	0 .25 8 .25 6 .25 7	Sa
uman, Argentina	Mis P No P Bro P Lgs P Hu P Cc F	1.31 1.44 1.44 1.56 1.48	.20 .20 .20 .20 .20 .20	Su,T,F M,Th,Sa M,Th,Sa Su,W,F M,Th,Sa M,Th,Sa	.10 10 .10 .10 .10				Wa TW Cg TW Ph TW Bw TW Do TW NykAI	W 1.85 W 1.85 W 1.70 W 1.82 F 1.76	.25	M,Sa Sa M,W,Sa M, F	.15 .15 .15 .15 .15	Douala, Fr. W. Africa. **Dublin, Eire  Durban, U. of S. Af East London, U. of So. Africa El Adem, Libya	NykB NykB NykB	F 2.5 10 1.1 30 1.1 30 2.9 30 3.0	7 0 .25 4 2	Dly
maco, Colombia	Min F No F Bro F Les F Hu F Ce F	78 P 1.14 P 1.17 P 1.44 P 1.25 P 1.20	.10 .20 .20 .20 .20 .20	Sc F F Th W.Sa W.Sa	.10 .10 .10 .10 .10	Auckla August Bagda Bahrei	and, N. Zta, Italyd, Iraq		Nyk 8 NykB( NykB( NykB( NykA) NykB( NykB(	O 1.78 O 3.88 O 1.51 F 2.41 O 1.90 O 2.05	.25		.15 .25 .25 .15 .25 .25 .25	El Golea, Fr. W. Africa Elizabethville. Belgian Congo Fes, Morocco Ft. Tripquet. Fr. W. A	NykB NykA NykA NykA	S 2.4 AF 1.6	6 2 2	. W,Sa
pan, Mexico	Bro H Les H Hu H Ce H	.18 .74 P .26	.10 .10 .10	Dly Dly Dly Dly	.05 .05 .05	Bangui Bangui Bangk	in, Egypt lore, India i, Belg. Cong cok, Siam	go	NykB( NykB( NykA) Nyk K Nyk F	O 2.70 F 3.18 K 2.60		W,Sa	25 25 25 25 25	Ft. Trinquet, Fr. W. A. Frankfort-am-Main, Germany	NykA Bw A	1.9 10 1.3 10 1.3	5 .25	Dly F

Gander

ATLANTIC	ROUT	ES—C	ontinued	_	ATLANTIC	ROUT	ES—	Con	ATLANTIC	ROUT	ES-	Con	tinued .		
Destination	U. S. Gateway	RATES (See Nat	-	Mall per 35 Oz.	Destination	U. S. Gateway & Afrline	RATE (See No		Depart	Mail per 15 Oz.	Destination	U. S. Gateway	RAT (See )	Value (ata)	Depart
rankfort, (cont'd)	Ph AO Nyk P Bw P Wa P Nyk80 Nyk88 Wa TW Ph TW NykTW Bw TW Do TW Cg TW NykAO Bw AO	1.40 .41 .39 .38 .35 .46 .49 .38 .	0 Su,F 0 M,W 5 Sa,M,T,W,F 0 M,Sa 0 M,Sa	.15 15 15 15 .10 .10 .10 .10 .10 .10 .10 .10	London, England	Nyk K Nyk S Nyk BO Nyk AO Bw AO Nyk AF Nyk P Bw P Nyk R Nyk BO Nyk SS	1.75 1.67 1.55 1.17 1.15 1.22 1.20 1.35 1.17 1.15 1.22 1.31 1.31 1.31	25	T.Th,Sa,M T.F Dly T.Th F F Thrice Wkly Dly F,Su M,W T,Th,Sa,M	.15 .15 .15 .15 .15 .15 .15 .15 .15 .15	Rome, (cont'd)  **  Salisbury, So. Rhod Santa Maria, Asores  Sharjah, Saudi Arabia	Ph TW DoTW Cg TW NykAO Nyk AF NykBO Nyk S NykSS NykBO Nyk P Bw P Nyk K NykAF	1.54 1.52 1.54 1.54 1.96 2.60 90 87 90 2.75	.25 .25 .25 .25 .25 .25 .25 .25 .10	M,Sa Sa Su,W,Sa T,Th,Sa W,Sa Sa,M,T,W,F Diy except Sa T, Sa
a. a	Wa AO Ph AO Nyk P Bw P Wa P NykSS NykAF NykAF NykAF NykTW Wa TW BwTW Do TW	.41 .39 .38 .35 .41 .38 .38 2.10 1.35 1.39 1.32 1.37	0 F 0 Dby 0 F,Su 0 M,W 0 Sa,M,T,W,F 25 M,T,W,F,Su 15 M,F W,Sa 15 W,Sa 15 Sa	.15 .15 .15 .15 .15 .10 .15 .15 .15 .15 .15	Louosor, Egypt. Lucknow, India Luxembourg. Luxor, Egypt. Lydds, Palestine Lyon, France. Madras, India. Madrid, Spain.	Nyk 8 Nyk AF Nyk BO Nyk 8 NykBO Nyk AF NykBO Nyk AF NykBO Nyk TW Nyk K Nyk K NykBO	1.27 2.25 2.47 1.31 1.85 1.81 1.31 2.65 1.32 1.29 1.70 1.48	25 25 25 25 25 25 25 25 25 25 25 25 25 2	W,Sa W,Sa Su,M,W,Th,F F T,Th,Sa,M	25 25 15 25 25 25 15 15 15 15 15 15	Shanghai, China Shannon, Eire	NykBO BwTW Cg TW NykAO Bw AO Wa AO Ph AO Nyk P Bw P Wa P NykTW Ph TW Do TW WaTW	1.03 1.17 1.06 1.03 1.10 1.08 1.06 1.03 1.10 1.06 1.06 1.10	.25 .25 .25 .10 .10 .10 .25 .25	F Sa Dly Th F F Dly F,Su M,W Dly M,Sa Sa M,Sa
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NOTE: Pan American Airways requires the prepayment all charges, plus a fixed off-line deposit to cover costs transshipment and reforwarding to final destination of e shipment. This off-line deposit consists of poundage arges from London to final destination of shipment,

plus transshipment bonded entry fee in England, and trucking charge to airport of despatch in England. Transshipment bonded entry fee in England is as follows: one package or first package of a lot shipment—\$1.00; each additional package—\$.82; arcess valuation charge es

shipments valued for carriage in the airwaybill in excess of U.S. \$400, for each additional \$400 (over the first \$400)—8.32. Trucking charge to airport of despatch in England is \$.02 per pound, with no minimum charge.

International Air Cargo and Mail Tables are a standard feature in AIR TRANSPORTATION . . . This is another typical service for air shippers who require up-to-the-minute data. The rates appearing in this issue were current at presstime.

#### Current Net Advisory Rates for War, Strikes, Riots, Etc. Generally in Use in American Marine Insurance Markets for Mail and Air Shipments

	joi internet in ortherness		
	Schedule Dated February 5, 1948		
A—Reg	istered Mail, excluding Registered Air Mail and Air Express: All securities, including non-negotiables, documents and similar interests—20% of Courrency including jewelry, precious stones and metals, etc.; also miscellaneous cargo—	argo Rates, with 1½-100% of Cargo Rate	c minimum.
B—Reg	istered Air Mail and/or Air Express and/or other shipments by air: Western ments between points in Continental United States and/or Canada:	Hemisphere excl	uding ship-
	All securities, including non-negotiables, documents and similar interests		
UNITE	D STATES or CANADA to or from:	All Securities, including non-negotiables, documents and similar interests	All Other
	1. (a) British Isles, Eire, Sweden, Holland, Belgium, Portugal, Spain, Switzerland, Iceland and Greenland (b) France (c) Italy 2. Africa except Egypt 3. Arabia, Egypt, Syria, Cyprus, Turkey, Greece, Iran and Iraq 4. Palestine 5. Afghanistan and Ceylon (if direct) 6. India 7. Chungking	64c% 34c% 14c% 24c% 374 <b>c%</b> 384c%	2½c% 12½c% 6¼c% 2½c% 75c% 7½c% 12½c%
	8. Australasia		2½c%

9. Philippine Islands ..... 3%c% C-Ordinary Parcel Post, Government Insured Parcel Post, Registered Post, Ordinary Mail (Excluding Air Mail) except

(A) Shipments to from Spain under policies endorsed with Airborne Clause, Lisbon rate will be charged, plus an additional charge of 2½c% because of the possibility that shipments of valuables may go forward to or from interior points by air.

(B) United States to from Marine 214c% provided coursed agrees to pay reduced rate on all chipments otherwise.

(B) United States to from Mexico 2½c%, provided assured agrees to pay reduced rate on all shipments, otherwise individual shipments at full cargo schedule rate.
 (C) United States or Canada to or from Hawaiian Islands—Transpacific Cargo Rate.
 Express (Excluding Air Express)—Charge Cargo War Risk Schedule Rates.

## THE NONSKEDS

SANTA FE SKYWAY, which has been operating between New York and California and intermediate points since July 1, 1946, is folding up—but not without a parting blast for the Civil Aeronautics Board whose attitude was called "obviously unfriendly." H. R. Lake, president of the airline, charged that the CAB's singling out Skyway and denying it the exemption granted to other air cargo carriers is a clear indication that the Board is determined to exclude surface carriers from any effective participation in the development of air transport regardless of the benefits that would accrue to the public and to the national defense program." He said that the only possible conclusion one could reach as a result of the CAB's decision was that it "does not want to afford a surface carrier the opportunity for experimentation in and development" of air cargo in spite of the shipping public's interest. If surface carriers are "to receive consideration as other applicants for air certificates," Lake added, the Civil Aeronautics Act would have to be changed by amendment. And the upshot:

Mall per Oz.

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> "It is impossible for a contract carrier such as Skyway to operate on a profiable basis under present conditions."

> Following is the text of statement issued by Santa Fe Skyway after the CAB's decision:

"The decision to cease operations was made as a result of the obvious unfriendly attitude of the Civil Aeronautics Board towards the Santa Fe and other surface carriers. It is obvious that the Board does not share our view that the real interest of the public is in the quality and cost of service, but that the Board believes that the primary issue is who should be allowed to give service to the public. All of this was clearly reflected in the recent action of the Civil Aeronautics Board in denying Skyway the exemption which has been granted to other non-certificated air cargo carriers under the Board's Economic Regulation No. 292.5, which permits them to operate as common carriers of air freight pending action by the Board on their applications for certificates of public convenience and necessity. The action of the Board in singling out Skyway and denying it the exemption granted to the other air cargo carriers is a clear indication that the Board is determined to exclude surface carriers from any effective participation in the development of air transport regardless of the benefits that would accrue to the public and to the national defense program.

"Skyway, in conjunction with the Santa Fe Railway and the latter's trucking subsidiaries, offered to render a coordinated air, rail and truck service in the general territory served by the Santa Fe Railway System in applications which were first filed in November, 1946, and amended in May of 1947 to include service to New York. Although an early hearing was requested the Board has taken no action on these applications and there is little prospect that they will be set for hearing within the next several months.

"Skyway was organized in May, 1946,

and since that time has operated a fleet of seven air freighters more than 2,000,000 plane-miles with a perfect safety record. The air freight planes operated by Skyway are the finest and best equipped in service today. Skyway's efficient and dependable service has received the enthusiastic support of the relatively few customers it has been permitted to serve as a contract carrier. Further development and expansion of service is prevented by the refusal of the Civil Aeronautics Board to grant Skyway the temporary common carrier rights which have been granted to the other non-certificated cargo carriers.

"In framing the exemption regulation the Board took notice of the fact that the rapid development of the air freight field resulted, not from the efforts of the certificated airlines, but from the activities of the non-certificated cargo carriers, such as Skyway. The Board recognized that without common carrier rights these cargo carriers would not be able to continue the development of this new industry during the period before final Board action on their applications for permanent common carrier certificates. It was recognized that without such temporary rights many or all of these newcomers would be forced to abandon their operations thereby depriving the public of the benefit of their experience.

"Immediately after issuance of the exemption regulation in May, 1947, Skyway petitioned the Board to broaden the exemption to include a surface carrier subsidiary such as Skyway, pointing out that the grounds on which the exemption was based were as applicable to Skyway as to the other non-certificated cargo carriers. Although these other cargo carriers have been operating as common carriers under the exemption since June 10, 1947, no action was taken on Skyway's petition until December 5, 1947, when the petition was denied.

"The only possible conclusion from the Board's action in excluding Skyway alone from the benefits of this exemption is that the Board does not want to afford a surface carrier the opportunity for experimentation in and development of this fast growing air cargo field regardless of the interests of the shipping public. The Board has consistently refused to grant air certificates to surface carriers or their subsidiaries relying upon a strained and unwarranted construction of the Civil Acronautics Act and upon the unfounded assumption that entry of surface carriers would hinder development of the air transport field. The case of Skyway offered the Board an opportunity to test this assumption by permitting a surface carrier subsidiary to operate under a temporary exemption as a common carrier. The Board has clearly indicated that it does not want to make the test.

"It is apparent that the Board's discriminatory policy against surface carriers can only be changed by amendment of the Civil Aeronautics Act to make it clear that surface carrier applicants before the Board are to receive the same consideration as other applicants for air certificates. Legislation, with this end in view, was



INFORMATION ON REQUEST

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> Montreal, Quebec, Canada 353 St. Nicholas Street

Toronto, Ontario, Canada 28 Wellington Street West introduced in the last regular session of Congress, but after extensive committee hearings, no action was taken.

"It is impossible for a contract carrier such as Skyway to operate on a profitable basis under present conditions. As a contract carrier it can serve only a limited number of shippers while its competitors in the air cargo field are free to solicit traffic from the public generally and to develop their operations to the fullest extent. A destructive rate war financed, in part, in the case of the certificated airlines, by governmental subsidy in the form of mail pay, has reduced air freight rates to a non-compensatory level. In the light of these conditions, the Board's predilection against surface carriers and the evident impossibility of obtaining final Board action on the Santa Fe applications within a reasonable time, the Santa Fe has reluctantly decided to withdraw from the air transport field."

Flying Tiger Line: In 11 months of operations for the Pacific Division of the Air Transport Command, the Flying Tigers flew more than 33,494,000 ton-miles of high priority freight, in addition to more than 139,000,000 passenger-miles. Brigadier General Bob E. Nowland, in commending Robert W. Prescott, president of the Flying Tigers, stated that the record "unmarred by any accident involving a fatality, represents a remarkable achievement when it is realized that at no time during this period of more than 53,000 actual flying hours were more than 42 aircraft assigned to you for contract usage."

Transocean Air Lines: The airline has announced renewal of its sub-contract with Trans-Canada Air Lines for the transport of more than 14,000 emigrants from

Britain to Canada. In the past half-year Transocean has flown more than 6,000 of these emigrants. Some 8,000 more will have been transported across the Atlantic by the end of June. Twenty flights a month will be made during the Winter, afterward increasing to between 40 and 50 flights every four-week period. Transocean recently was awarded a United States Army Engineers contract for the transpacific movement of personnel and workers engaged in construction work at Army bases in the Pacific.

#### Alaska Nonskeds Hit

The "illegal" operations of non-scheduled operators between the United States and Alaska is the subject of a brief filed with the Civil Aeronautics Board by Pan American Airways. According to the airline, these operators have in recent months flown on a scheduled basis. Alaska Airlines is alleged to have made 49 Seattle-Alaska flights last August, 40 in September, 34 in October, and 32 in November. This is the line which, in the 1946 Pacific Route Case, was denied the right to operate a scheduled service between the United States and Alaska. PAA charged that flights by all unauthorized carriers from Seattle to the Territory totaled 195 in August, 151 in September, 148 in October, and 115 in November.

"No one visiting Seattle could believe that only two carriers are certificated between Alaskan points and Seattle," the brief stated. "The natural impression gained is that scheduled service is available by at least 10 airlines. Operations are conducted openly by these unauthorized carriers on exactly the same basis as

Pan American and other certificated air-

PAA said it lost \$2,000,000 in its United States-Alaska service during the first 10 months of 1947. This was offset in part by the CAB's authorization of a temporary mail payment amounting to \$906,000 for the same period. The line asserted that unauthorized service cut heavily into its traffic, bringing down PAA's load factor to less than 50 per cent.

The subject of rate wars was also brought forward in the brief. It cited Alaska Airlines' rate reduction last year which was called far below compensatory, adding that "it is common knowledge that the illegal operators have carried shipside traffic for whatever the passenger or shipper was able to pay."

#### **New Sabena Flights**

Sabena has inaugurated direct service to Frankfort, Germany, with flights making connections at Brussels. Another new service is a weekly transatlantic cargo flight from New York to Brussels.

New York-Brussels flights will be increased to three weekly (Tuesday, Thursday, and Sunday) in April, according to Fernand J. Martens, North American manager. Direct Sabena connections will be available to Cairo and Lydda in the Near East, and Congo and South Africa, as well as to Milan, Rome, and other European capitals.

#### **Air Terminal Bonds**

The first issue of the Air Terminal Bonds of The Port of New York Authority will be offered early this year in an amount tailored to the market and sufficient to cover the first costs of airport construction.

For over fifty years export freight shipments have been handled by barge or by rail or by motor truck, and by sailing ship or by steamer. Now it is the AIR—and through streamlined departments created to serve you.



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# AMERICA'S CARGOPLANE NEEDS

By REAR ADMIRAL
LAWRENCE B. RICHARDSON
U. S. N. (Ret.)
Vice President
Curtiss-Wright Corporation

What the Finletter Committee was told about meeting the requirements to achieve "the basic objective of air freight transportation at the low rates necessary to develop the great potential traffic volume available."

HE development of air cargo business started in the winter of 1919, and during the latter part of the 1920s the development of air express was stimulated by the transfer of the air mail service to private carriers. Rates in effect under early agreements were extremely high. For example, under the first tariff the rate per ton-mile averaged \$2.72. Little effort was made to establish a pure air express operation until 1931, at which time some of the major airlines began to take an active interest in air express and a rate of approximately 24 cents per ton-mile, or about twice that for rail express was inaugurated. In the latter part of 1932 a group of airlines formed an organization known as General Air Express. This organization was formed to enable these companies to act as a unit in the solicitation and handling of air express. The competition stimulated both as to service and as to rates, forced a reduction of rates by the Railway Express Agency, and shortly thereafter the General Air Express organization was abandoned in favor of a satisfactory arrangement with the Railway Express Agency.

During the period 1937-1945 little effort was made to develop air express traffic, because the airlines looked upon it primarily as a fill-in to their regular passenger and mail traffic.

The physical practicability of mass movement of air cargo was well established during World War II by the Air Transport Command, its contract carriers and the Naval Air Transport Service. The number of ton-miles of cargo operations were at the rate of several billions per year during the last two years of the war.

Upon termination of hostilities a new group of operators with their air freight carrying experiences during the war as a background, obtained surplus cargo type airplanes and started air freight operations.

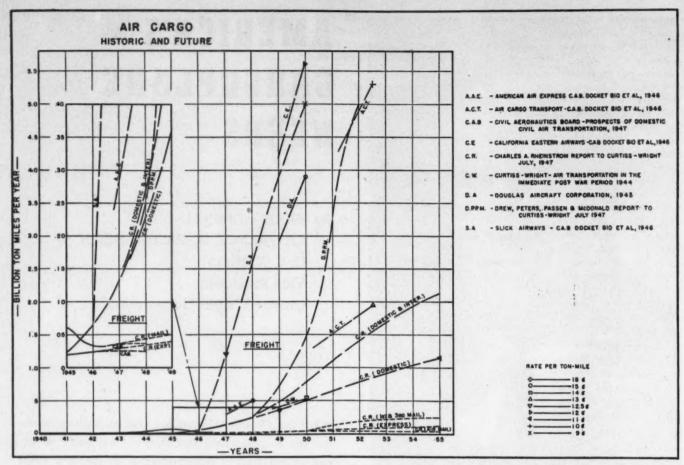
The year 1946 saw the movement of a total of about 90,000,000 ton-miles of air freight and air express, divided about evenly between independent and the certificated carriers. This represented a tremendous expansion over air cargo volume in 1945.

By Spring of 1947, the laws of economics had narrowed down the number of independent carriers to only those who had strong financial backing and sound management. Their position was further recognized by the CAB's action in May, 1947, which granted several of these operators temporary common carrier status.

Meanwhile the scheduled passenger carriers introduced an industry-wide consolidated air freight tariff, effective August 1, 1947, involving a 20 percent reduction in rates. Hardly was this tariff distributed when two major passenger carriers announced freight rates ranging down to 12 cents per ton-mile.

With the new low freight rates of the scheduled passenger carriers and the recently published tariffs of the independent freight carriers, the last few months of 1947 were a period of tremendous expansion.

The potential of the air freight business is practically unlimited. As the system grows and gains a background of financial and operating experience, and as new and more efficient operating equipment becomes available, it is certain that costs will decrease considerably below their present figure. As the ingenuity of man has perfected new and more efficient means of transportation, new markets have been



opened, and the pattern of the world's business has radically changed. This change will be reflected in the future of world business as the airplane assumes its appointed role as a primary carrier of world commerce.

A large source of cargo for the airfreighters of the future is that of the new business—now perhaps only an idea—which will be built up around the speed and efficiency of the airplane as a carrier. Examples of these sources of cargo are the nation-wide distribution of perishables such as cut flowers, ripe fruits and vegetables, fresh meats, frozen foods, drugs, etc.

Because of the absence of frequent shocks and jolts, starting and stopping, and en-route handling, the airplane is much more efficient in the moving of sensitive and delicate items. Also of importance to the shippers is the fact that, due to the airplane's relatively fragile structure, cargo must of necessity be handled carefully during loading and unloading. For these reasons another field is open to the air carriers. Scientific and medical equipment, cameras and projectors, watches and clocks, radios and electronic apparatus, glassware, and similar commodities make up a sizable portion of air freight cargo.

One of the largest fields for the air cargo industry will develop from the proposed movement by air of all first class mail, and parcel post which travels more than 400 miles. It is esti-

mated that a billion ton-miles of mail and parcel post are transported annually over distances exceeding 400 miles.

When more than one type of transportation is available, the shipper uses the one that provides the greater benefits. This choice may be based on cost, speed, convenience, regularity or better advertising. Air cargo in the past had only higher speed to offer and lack of regularity often offset this advantage.

The chart (Air Cargo, Historic and Future) shows various predictions for the amount of air freight that will be available in the future if certain rates are in use and the sources of these predictions are shown. These data indicated that in 1950, an annual air cargo

### AIR CARGO RATES TO

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information, consult your own Travel Agent or the nearest District
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\*Serving Panama, Colombia, Ecuador, Peru, Bolivia, Brazil, Chile, Argentina volume of two billion ton-miles will be available. This volume includes the new business that will be generated by the basic rapidity of air transportation as well as penetration of the traffic presently handled by ground transportation means. Two years later, in 1952, under their initial impetus, the annual ton-miles will have grown to five to six billion at average rates below 10 cents per ton-mile, which is directly competitive with expected ground service rates for all commodities feasible for air transportation.

At the start of World War II, this nation was inadequately prepared in the air transport field. Existing designs of commercial passenger airplanes were altered to permit their use as military transports for cargo and personnel. Upon cessation of hostilities, a portion of these same passengercargo planes were put to use in the postwar air cargo field. With this type of equipment, a marked reduction in air freight rates below those now in effect cannot be anticipated. This can only be achieved by the development, production, and operation of airplanes designed specifically for cargo handling, considering both commercial and military aspects of the problem. Combined passenger and cargo airplanes cannot best serve either function because of the differences in scheduling, loading and range requirements.

Extensive analyses have shown that the most rapid decrease of direct operating costs per cargo unit results from increase in airplane weight carrying capacity. However, there are many practical limitations on expansion of airplane size. Aircraft engine powers have developed at a remarkable rate over the past years and will probably continue to increase in the future, yet these increases in unit engine power have not precluded the necessity of installing greater numbers of engines in new airplanes to meet the overall demands of power. Increasing the number of engines in an airplane, however, unavoidably increases the complexity of operation and maintenance requiring the employment of an increased number of both flight and ground personnel. Probably any greater number than eight engines per airplane would increase this complication to a definite uneconomical degree.

Another limit on airplane size at present arises from airport size, runway strength and hangar facilities. Obviously, the extent of this limitation is influenced by consideration of presently available and planned construction but unless development and expansion of these facilities greatly increases in rate in the future, airplane size will

continue to be limited by runway lengths, hangaring space and other airport installations.

Airplane size, as represented by its payload capacity, reaches a practical limit when the loading time begins to reduce the operational utilization of the airplane and the service supplied to the shipper. Future air cargoes will probably not change substantially in character from the present accumulation of individual shipments weighing on the average not more than several hundred pounds. As a matter of fact, predictions of air freight for the coming years indicate that the average weight of a single shipment will decrease as the development includes a wider base of commodities. In the predictable future bulk shipments by air appear unlikely, according to all available estimates. Hence the cargo loading problem is receiving increasing attention during the design stages of new airplanes, in order to achieve the ultimate objective of high-speed, economical air freight transportation.

Multiple loading doors, truck bed height floors, full end loading, rectangular cargo compartments and specialized cargo handling equipment are results of this design emphasis. However, even with these features as well as with palletized loading, fuselage compartmentation and other forms of

Transportation by



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semi-automatic loading, the total loading time will increase beyond the economical limit as payload is further extended. This imposes limit on the size of the cargo compartment and therefore on the airplane size. It appears reasonable to assume that each design should allow the full cargo compartment to be loaded in no more than one hour for a typical cargo. Greater time allowance than this in the design stages would rapidly reduce the basic speed advantage of air transportation of freight.

An additional size factor in cargo airplane design is concerned with handling certain heavy and large size shipments, principally large vehicles and other heavy machinery. Although normal air commerce may not involve these items to an appreciable extent, the size, dimensions and arrangement of new cargo airplanes should provide for the transportation of this equipment under emergency or other special conditions. Thus it is basically essential that a high degree of convertibility be designed into all commercial cargo airplanes to achieve full realization of the national advantages of a large-scale, vigorous air cargo fleet. Emphasis on convertibility or adaptability to military use may result in some compromises to commercial requirements and may rule out certain very specialized military uses. However, a good commercial cargo airplane can perform all but few kinds of military missions.

In addition to payload capacity, the required range of an airplane is a fundamental factor in determining its overall size and weight. Necessary fuel loads for optimum economic operation generally exceed 50 percent of the payload itself in weight, and may actually equal the payload under many operating conditions. It is believed that two range categories will be necessary to satisfy the full traffic demand. The medium-range air lane will be operated on an intercity and off-line basis, carrying generally first class mail and



Major General Laurence S. Kuter, United States representative on the council of the International Civil Aviation Organization, surprise nominee of President Truman for the chairmanship of the Civil Aeronautics Board, who has been turned down by the Senate Armed Services Committee. The committee, in a letter to Truman, stated that it did not "favor the practice of using special legislation as a means of avoiding statutory wage limitations." However, the President has denied that he sought to raise the pay for the CAB job from 10,000 to 15,000 a year. He has explained that he wanted Kuter to serve as Board chairman under the same type of Congressional waiver which enables him to work in the State Department as representative on the ICAO council.

a type of cargo now termed "air-express," with a design range near 1,000 miles. The long-range machine will engage in area transportation of goods, with a greater percentage of full planeload lots, and will be designed for nonstop transcontinental and overocean operation. This airplane should be designed for a range of at least 2,500 miles for over-water operation (at a certain reduction in payload), and must be capable of making at least 1,500-mile trips non-stop with maximum payload, for domestic operation.

The transcontinental type of airplane should be capable of attaining a speed to permit overnight deliveries between

any two points in the United States, either nonstop or with one stop, depending on the total distance to be traversed. For this requirement, the most critical case is the West-to-East transcontinental trip where the change in time zones has an adverse effect upon scheduling. This will require average speeds to 250 to 300 mph. Any further increase beyond such speeds is not considered necessary for the present, since they will permit round-trip transcontinental trips within a 24-hour period. Economy of operation at these speeds can be obtained by designing for aerodynamic cleanness and efficiency, still maintaining good functional characteristics and minimum time on the ground. Normal cruising should be at moderately high altitudes, say 20,000 feet, using internal combustion engines.

The second type of air cargo plane will be used in intercity operation and be designed for shorter ranges and less payload. Because of the localized nature of such operation, the economic necessity for high average speeds is no longer as great. However, since this smaller airplane will undoubtedly have fewer engines than the larger airplane, present Civil Air Regulations will dictate a design with speeds in excess of that required from operational considerations alone, i.e., where 200 to 250 mph would be adequate, average speeds of 250 to 300 mph would probably be attained. This characteristic will augment the value of the airplane as a short-range military transport.

Due to the shorter ranges encountered, cruising altitudes of 10,000 to 15,000 feet would produce about the best compromise between schedule reliability and the added cost of mechanical complexity required for higher altitude flight. Because of the necessity of frequent stops, the airport facilities available will be average to below-average and will require design consideration of take-off and landing runway lengths of 3,500 to 4,500 feet.

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Up to the present point the discussion has been predicated upon the use of internal combustion engines only. While it is believed premature to introduce turbo jet power-plants into this text, a few comments relative to the gas turbine propeller combination are believed in order. Continued development should make the turbo-prop units attractive from an economic point of view in the not too distant future, because of the reduced unit fuel cost and an approach to equivalent fuel economy of internal combustion engines. However, higher cruising altitudes will probably be required, with some added complexities in the airplane designs.

Based upon the above discussion, and extending present experience in line with available predictions, it appears that cargo airplanes of the next five to 10 years will have the following characteristics of payload, gross weight, and power:

#### Transcontinental and Over-Ocean Operation

Payload Capacity 16 to 18 tons Gross Weight 110,000 to 120,000 lbs. Total Take-off

Total Take-off Power 10,000 to 12,000 BHP

#### Intercity Operation

Payload Capacity 8 to 10 tons
Gross Weight 65,000 to 70,000 lbs.

Total Take-off Power

5,000 to 6,000 BHP

These airplanes will have cargo compartments specifically designed for the most efficient cargo handling possible. The interior volume must be no smaller than that corresponding to a cargo density of six pounds per cubic foot, which will allow plane-load transportation of all large volume categories of air freight. The cargo floor must be level and at truck bed and loading dock height, which feature will result in an estimated \$2.50 per ton savings in cargo handling costs. Multiple, large size doors must be provided for rapid transloading as well as for efficient terminal cargo handling. The compartment should be essentially rectangular to allow storage and tie-down with a minimum of unusable space. Finally the cargo space must be provided with efficient heating and refrigeration equipment, with provision for segregation of cargo types so that simultaneous heating and/or cooling are available for specific areas.

None of the airplanes presently available for air cargo transportation meets the above requirements completely enough to achieve the basic objective of air freight transportation at the low rates necessary to develop the great potential traffic volume available. A development program concentrated around the above design objectives and requirements, if firmly implemented,

will provide equipment capable of delivering mass air-freight transportation on a profitable basis in peace, and adaptable as an invaluable part of our military strength in war.

The potential cargo volume which will be available to the new design allcargo planes will justify at least 200 aircraft in the long-range category by 1950 and will necessitate 21/2 times that many, or 500 airplanes by 1952. This cargo fleet will be augmented by a fleet of intercity airplanes of approximately half these numbers. This total fleet of 750 all-cargo airplanes, designed for the most economical operation possible, will form the basis for the expansion of this new industry, supplying one of the most fundamental services required by a developing industrial economy. If the cargo planes are so designed that they will be fully adaptable to military cargo carrying, this fleet will form the necessary reserve for the rapid transportation demanded by military requirements, as well as providing a huge pool of trained technicians to operate the equipment. On this basis, the air cargo industry is seen to assume its appropriate and major position in the national economic and strategic pattern.

That there is a close interrelation between Army, Navy, and commercial (Concluded on Page 42)



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# Winged

# Merchandising



1 TELEPHONE ORDERS are received (left) from Sears' Airborne Telethrift Shopping Service customers . . . or, if preferred, such orders can be placed (right) at the handy Airborne Shopping Desk.

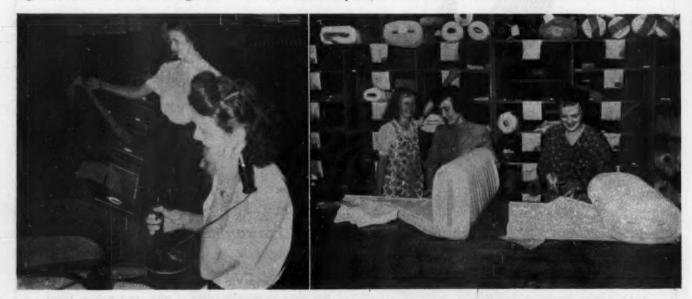
DODAY air freight is an integral part of our distributive system. In the two short years since V-J Day, volume shipments of goods by air, and the lower rates of the air companies, have brought air freight into its own necessary place in the modern-day economy. New methods of cargo conditioning and coordination of air and ground

services are enabling the airlines to compete with all surface transportation in every-day shipments of increasingly diversified cargo.

Smoother coordination of surface cartage companies with the airlines has expedited movement of shipments to the airports. After the shipments are received at the airports, more uniform

methods of handling have been perfected—in some cases a consolidation of handling or terminal facilities has been activated—in order to increase efficiency and reduce costs.

The huge increased public acceptance of air freight as a transportation medium has largely been the result of two factors: the efforts of the airlines to



2 AND, IN EITHER CASE, the orders are teletyped and promptly received (left) in Kansas City . . . This airborne order for piece goods, for example, is filled (right) at the Kansas City warehouse.

PAGE 32—AIR TRANSPORTATION—Air Commerce

# Pays Off

Airborne Telethrift Shopping Service, initated a year and a half ago by Continental Air Lines and Sears Roebuck, is setting a pattern which may well be followed throughout the country.



3 AND THIS ONE for women's clothing (left) receives equal special attention by an employee . . . Then come the wrapping, labeling, and placing in canvas bags (right) for the outgoing trip.

develop air freight, and the cooperation of the shippers.

on as

WO

In a move which has had a far-reaching effect on scheduled air freight and the potentialities of parcel post by air, the Sears Roebuck Company of Denver together with Continental Air Lines have collaborated to provide overnight delivery by air to buyers in Pueblo, Colorado Springs, and Denver, from the Kansas City warehouse of Sears (See August, 1946, issue of Air Transportation.)

The past July 10 marked the first year of the Airborne Telethrift Shopping Service initiated by Continental and Sears. This merchandising event, serving a part of the West, has reached an importance of national magnitude. Catalog buyers in the above cities and surrounding communities of western Colorado are now able to purchase the usual items by telephoning the Airborne Telethrift divisions of the Sears stores in any of the three cities.

At these three points purchases are

relayed daily by direct wire to the Kansas City warehouse.

In Kansas City the airborne purchases are given preference over the routine mail orders by their immediate selection from stock and packaging in one hour, compared to the 3½ hours consumed in the normal processing of mail orders. Airborne shipments are then consolidated in canvas containers assigned to the individual cities, speeded to the airport, and placed aboard the early evening flights of Continental.



▲ FINALLY, DELIVERY TO THE AIRPORT where a Continental plane takes on Telethrift orders for swift delivery to customers.

Delivery is made to the customers in the three Colorado cities early the following morning by a fleet of motorized package delivery trucks.

This high-speed service is provided at no extra cost to the consumer, who pays only the catalog price of the merchandise plus a small delivery charge based on a scale of 15 cents for shipments up to five pounds, 20 cents for shipments up to 15 pounds, with continued reductions in rates to a 90-cent charge for a 100-pound package.

The Airborne Telethrift Shopping Service is the result of many months of research and marketing surveys by the Continental group in Denver and Sears executives. Installation of an extensive teletype and telephone system between the Colorado cities and Kansas City was necessary to provide the fast and direct communication service so essential to the efficient operation of such a unique merchandising plan.

This revolutionary new plan of catalog merchandising, geared to the speed of air transportation, is the brainchild of John A. Smith, CAL's cargo sales manager, who has been prominently associated with air shipping for the past 10 years; and James E. Peri, superintendent of the Sears store in Denver.

"The use of Continental Air Freight in connection with our Airborne Telethrift Shopping Service complements our extensive retail stores operation and brings the 150,000 catalog items of the Sears' Kansas City warehouse direct by air to the doorsteps of these communities in Colorado and the Rocky Mountain area," said Wade L. Hampton, executive territorial manager of the Seara stores in Colorado.

"This new plan of merchandising has greatly affected the buying habits and economic life of thousands of people in isolated regions located far from major merchandising, supply and warehousing centers," Peri pointed out. "Now, by combining the most expedient methods of communication with the fastest type of transportation and shipping, we are able to offer a service to

the consumers of this area that may be the forerunner of a new nationwide plan of distribution and merchandising."

The small difference between the delivery charge to the customer and the published CAL air freight tariff rate is absorbed by Sears, but it is expected that these costs will be reduced to a minimum as shipments increase, due to economies of air shipping directly affecting a reduction in operating expenses, warehousing costs, and the elimination of inventories.

At the same time, John A. Smith reported that up to October 17, 1947, more than 78,000 orders had been flown via the Sears-Continental Airborne Shopping Service. The average monthly orders amounted to 14,000. During the approximate 15 months of operation of the service, 100,241 ton-miles were flown and more than 300,000 pieces of merchandise were flown to consumers from the Kansas City warehouse.

So far airborne orders have included (Concluded on Page 40)



[REG. U. S. PAT. OFF.]

WELL, Pan Am has gone and done it. At last an airline has gone on record offi-cially stating its belief that within a decade air cargo revenues will equal those from air passengers. In the past, air cargo men have been predicting the same unofficially, and have offered time limits ranging from three to 10 years. (See October, 1946, AIR TRANS-PORTATION.) But Pan Am, through its cargo sales manager, John W. G. Ogilvie, has given the prediction a red seal.

Ogilvie pointed out that between the years 1927 and 1941, its air cargo business could do no better than reach a high point of slightly more than five percent of the airline's total revenues. Last year, the figure was a little over 10 percent of the total. This, it is understood, did not include air mail. Lower rates, higher frequency, and bigger equipment are the reasons given for the rise. Ogilvie expects most of the future cargo increases to come from transatlantic and transpacific traffic.

Incidentally, Pan Am is the first of the airlines to have dropped the words "express" and "freight" for the all-inclusive term "cargo". This is right in line with an IATA recommendation made in Rio last Fall.

The Civil Aeronautics Board has given the green light to Air Cargo, Inc.'s establishment of a consolidated ground service organization for its 17 participating scheduled carriers. The functions include operation of consolidated ground terminals, operation of ground transportation incidental to airline haul, facilitation of joint interline cargo movement over the 17 lines, arrangement for joint interline agreements and services with other common carriers for over-the-road hauls in connection with transportation of goods by surface carriers and aircraft, and the provision of ground operations at designated

opoints. These are the two conditions to which ACI is subject:

• ACI and its member air carriers must apply to the CAB copies of such agreements and documents and submit such information in relation to ACI's activities as may be prescribed or requested by the CAB's Economic Bureau.

· Any holder of a certificate of public convenience and necessity authorizing transpor-

tation of property by air is authorized to participate in ACI as a matter of right.

Following are the 17 carriers referred to above: All American, American, Braniff, Capital, C&S, Colonial, Continental, Delta, Eastern, Inland, Mid-Continent, National, Northeast, Northwest, TWA, United, and Western.

The first news was that the Post Office Department had completed plans for the early inauguration of air parcel post service "between the United States and those countries in Europe, the Middle East, Africa, and the Near East, where agreements can be worked out for the placing in operation of such a service." Less than a week later it was learned that the fixing of an attractive rate for the prospective shipper of air parcel post was holding up the works. However, it is believed that the rate will be as low—if not lower—than the current domestic air mail rate of five cents per ounce. It may be expected that the new service will absorb much of what pre-viously was termed "air express." (Actually, no one knows where air express left off and air freight began. Some people claimed that an express package was one not exceeding 25 pounds. But that was purely hypothetical.)

According to the previous announcement, the points anticipated for the new service are the United Kingdom, Continental Europe, Bermuda, Newfoundland, Azores, Iceland, Senegal, Gold Coast, Belgian Congo, Union of South Africa, Algeria, Tantica, Egypt Polectica South Agrica, Tunisia, Egypt, Palestine, Saudi Arabia, Syria, and India.

The establishment of "reasonable air freight rates" has prompted the intervention of five prominent parties in the CAB investigation of scheduled and nonscheduled airline cargo tariffs. Petitions to take part in the inquiry have been granted to the Postmaster General, Railway Express Agency, American Newspaper Publishers Association, Kentucky Aeronautics Commission, and the Indiana State Chamber of Commerce. Hearing has been set tentatively for the early part of this month.



KLM has some interesting things to report about its air freight services in the West Indies, the bulk of which is devoted to the carriage of perishables. The Dutch line points out that "a daily supply of vegetables, fruit and meat is required in the barren regions where agriculture and cat-tle-breeding are impossible, but where the oil fields and refineries with their large number of employees must have their supplies." KLM's cargo services in the Caribbean area jumped nine-fold last year as compared with 1946. Astonishing, to say compared with 1946. Astonishing, to say the least! In a single month—May, 1947—more than 8,500 pounds of frozen vegetables alone were flown from Miami to Maracaibo, and 27,000 pounds of fresh vegetables from Miami to Curacao. Compare the latter figure with the present weekly total of 12,000 pounds! KLM is transporting tons of meat and vegetables from Ciudad Trujillo to Willemstad.

Statistics tell terse stories. American Airlines reports that its total of 10,960,237 ton-miles in the January-November, 1947, period is an all-time high for a scheduled air carrier. The November total alone was 1,590,956 ton-miles freight, as against 876,-823 ton-miles in the comparative month in 1946. United's freight and express combined totaled 1,872,764 ton-miles in December, as compared with 1,564,282 in December, 1946. Air mail operations showed a 10 percent decrease from a year ago. Philippine Air Lines, which carried 46,053 pounds of cargo in November, dropped to 32,162 pounds in December. T. D. Woodward, air cargo sales manager for PAL, attributed the drop to the tapering off in shipments just before Christmas. Mean-while, REA revealed that its November international air shipments rose 19.1 percent above the similar 1946 month.

Air cargo tidbits: S. E. Russ of TWA, in speaking of strange cargoes, levels a finger at some of his line's most recent: storks, vultures, crocodiles, trees, turkey storks, vultures, crocodiles, trees, turkey eggs, and—of all things—two bottles of beer. The latter went all the way from Milwaukee to Ceylon. Now you can expect anything . . . Now that Irish Airlines has been given the go-ahead signal to begin flight operations across the Atlantic—St. flight operations across the Atlantic—St.
Patrick's Day is the big day—we can expect to receive more of that airborne type of liquid refreshment for which Eire is famous . . . A short while ago the word got around that a bear of considerable heft was coming in on a certain domestic carrier. Curiosity being what it is, the plane was met by a small delegation of press representatives who were met by a giant teddy bear.

#### WHAT AMERICA'S TOP AIR CARGO MEN THINK

(Continued from Page 9)

CHARLES F. WILLIS, JR. President

WILLIS AIR SERVICE

T is, in a sense, disappointing that the Air Policy Commission placed so much emphasis on the military aspects of aviation's many problems, although admittedly national security is of paramount and overriding importance to all of us. However, we air freighters are glad that the commission has so forthrightly credited us with the major responsibility for turning air freight transportation from a paper plan to worthwhile reality. Certainly no one can quarrel with the Finletter view that

the agency charged by law with that responsibility must determine that public convenience and necessity requires the permanent certification of the presently registered all-cargo lines and certainly we agree that the pioneering air freight companies should be given first preference.

#### LaGuardia Runways Improved

Runways and taxi strips at LaGuardia Field have been remarked and painted to conform with the latest Government standard. The runways have been painted white, with double six-inch center lines imbedded with glass beads to reflect landing lights used in periods of low visibility. The taxi strips have been painted with yellow center stripes. The 60-foot runway numbers, the landing strips are marked with a series of parallel bars, each indicating 1,000 feet of runway, with half-bars at 500 feet. The runway numbers indicate their magnetic compass direction.



Kastrup Airport, Copenhagen, now undergoing considerable extension (1) New plant to produce enough power to electrify a town of 50,000 (2) Garages for Danish Airlines' airport buses. (3) First element of office premises. There eventually will be four double elements. (4) Repair hangar and workshops. (5) Scandinavian Airlines System hangar for DC-4s. SAS will be based here beginning this Spring. (6) Maintenance hangar. (7) Canteen. (8) Taxiway. The plane on the lower left is an SAS DC-4.

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#### TRANSPORT TIDINGS

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TWA-Delta Agreement

An equipment interchange agreement
between TWA and Delta Air Lines has
been approved by the Civil Aeronautics
Beard The agreement will permit the Board. The agreement will permit the transportation of persons, property, and mail between points on TWA and Delta routes without the necessity of changing planes at Cincinnati.

#### CMA Seeks Permit

Compania Mexicana de Aviacion, S. A., has applied to the Civil Aeronautics Board for a provisional foreign air carrier permit authorizing freight service between points on its system within Mexico and Laredo and Brownsville. The company declared it wanted connections with certificated United States cargo carriers in order to furnish continued two-way air freight service between countries.

In neither of the border cities within Mexico—Nuevo Laredo and Matamoros are there adequate runways for landing and taking off DC-4s which CMA has assigned for this service. CMA requested a provisional permit subject to expire upon improved conditions of the last respect to improved conditions at border airports within Mexico or when a bilateral agreement is signed between the two countries.

PAA Eyes Jap Domestic Runs
Pan American World Airways has requested the Civil Aeronautics Board for permission to operate domestic air services connecting the main islands of Japan. The request is in the form of an application for an amendment to the line's present certifi-cate authorizing it to serve Tokyo on its round-the-world route from San Francisco and Los Angeles to Calcutta.

Branching out from Tokyo, on the main island of Honshu, the proposed route would connect the capital and Sendai and Hachinohe with Hokkaido Island to the north, with a terminal at Chitose. To the south of Tokyo the route would connect Honshu with the island of Kyushu by way of Nagoya, Osaka, and other points. Ter-minal point would be Kanoya on Kyushu.

In addition, on Honshu, the routes would serve Niigata in the Sea of Japan across the island from Tokyo and Kanazawa across the island from Nagoya.

#### TWA-KLM Interline Pact

An international interline passenger and general agency agreement is now in effect between TWA and KLM. A similar agreement was in effect between TWA and KNILM which has been absorbed by KLM. The provisions of the international interline passenger agreements will also govern the interchange of cargo traffic. **Boeing Subsidiary Merged** 

Boeing Aircraft Company, a wholly-owned subsidiary, was recently merged with its parent organization, Boeing Airplane Company.

#### New PAL Office

Philippine Air Lines has announced that its New York offices have moved from 75 West Street to 511 Fifth Avenue. George B. Ingram is district traffic and sales

Ray Resigns

James G. Ray, vice president of South-west Airways since 1941, has resigned his post to establish a private consulting business specializing in feeder airline clients.





## Air Cargo to Brazil!

Stark Air Shipping announces the appointment of NORSTAR, LTDA. as General Agents for Brazil to expedite air shipments.

Stark continues its service as agents for all airlines to assist in forwarding shipments to all destinations served by air transport carriers.

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#### SPOTLIGHTING U. S.-ALASKA AIR CARGO POTENTIAL

of the advantage of speed which should be possible via this route would probably be lost if those circumstances were in force.

The interior route has a natural advantage for the shipment of industrial goods into Alaska. As the source of supply of most of these goods is in the northeastern part of the United States. shipments would move to Minneapolis and thence northward instead of to Seattle and then northward. This route would also probably have an advantage in regard to the backhaul of fish. As its southern terminus is an interior point, there is likely to be a better market for fresh fish and shellfish at this terminus than in Seattle where similar fish and shellfish are caught. The interior route is slightly shorter between Anchorage and Chicago than the route to Anchorage from Chicago via Seattle.

The total present or the past volume of perishable agriculture commodities shipped to Alaska by surface transportation cannot be used to measure accurately the size of the present or future Alaskan market for airborne perishables from the United States. The population is increasing at a rapid rate (latest estimate gives a total of 90,000) which in turn is increasing Alaska's

over-all food requirements. Alaskans would probably consume a greater quantity of fruits, vegetables, and other perishable if a wider selection of high-quality perishables were made available to them by air transportation in all seasons of the year.

Comparative statistics on Alaska's population cannot be used in estimating the available market for airborne perishables, for it has been shown that the quantity of air freight hauled per capita, in Alaska, is many times that in the United States. As Alaskans are accustomed to paying relatively high prices for their food because of the high cost involved in shipping it from the States, a premium of a few cents per pound for airborne perishables of fresher or perhaps better quality would represent a smaller percentage increase in price over the price of surface-borne perishables than it would in the United States and probably would be paid more readily by Alaskan consumers.

The chief adverse factor in the transportation economy of Alaska is the lack of commodities for backhaul. The predominant movement of traffic for both surface and air transport agencies is from the United States to Alaska. The airlines may partially solve this in sev-

eral ways. One method now being used is to combine the transportation of freight with passenger operations. There is an influx of fishermen, day laborers. miners, and tourists in the Spring. This movement then reverses itself in the Fall, at which time the northbound planes may be filled with perishables. Another method of coping with the backhaul situation is to adjust the rates on the two movements so that the planes would be filled both ways. This might mean that rates on northbound traffic will be twice as high as rates on southbound traffic. Based on present surface transportation rates, there is evidence that a considerable volume of air freight could profitably be moved northward at 20 to 25 cents per ton-mile. If 10 to 12.5 cents can be averaged for full loads on southbound flights, the airlines can average 15 to 18 cents per ton-mile on their flights. This figure may be within the operating cost of the DC-4.

A wide variety of perishables and industrial commodities can be moved northward as there is a demand for and supply of these commodities available all seasons of the year. Fresh fish and shellfish are available for return loads during the Spring and Summer. Passengers are available for return loads in the late Summer and early Fall. Furs are available for return loads in the late Fall and Winter.





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de St. Phalle Floyd B. Odlum

W. O. Leonard William L. Bond Quentin Roosevelt Ostrom Enders L. J. Moorman Jr. C. P. Graddick

T. T. Hinman



#### EXECUTIVE

ANDRE DE ST. PHALLE, elected president of California Eastern Airways. He has moved to the Coast to take over position.

FLOYD B. ODLUM, president of Atlas Corporation, recently named chairman of the board of Consolidated Vultee Air-craft. Other directors selected were: C. E. craft. Other directors selected were: C. E. GROESBECK, OSWALD L. JOHNSTON, SYDNEY R. INCH, GEORGE H. SHAW, BEN O. HOWARD, RICHARD C. PATTERSON, JR., WILLIAM C. ROCKEFELLER, and EMMETT A. McCABE.

WALLACE O. LEONARD, new president of Pacific Airmotive. He succeeds Earl Herring who resigned for per-

ceeds Earl Herring who resigned for personal reasons.

WILLIAM L. BOND, QUENTIN ROOSEVELT, J. V. ROSCOE, and PHILEMON R. DICKINSON named by Pan American World Airways to the following posts: Bond, vice president-Orient; Roosevelt, vice president and di-rector of China National Aviation Corporation; Roscoe, assistant to the administrative vice president; and Dickinson, assistant to the regional director for the United Kingdom and Europe.

OSTROM ENDERS, president of the Hartford National Bank and Trust Company, elected a member of the board of

directors of United Aircraft Corporation.

JAMES G. RAY, vice president of Southwest Airways, elected a director of Aviation Facilities Associates, Arcata, Cali-

LEWIS J. MOORMAN, JR., promoted to the post of executive vice president of Slick Airways; and Charles P Graddick, elected vice president-sales and traffic. Moorman has been with Slick since its very inception. Graddick previously served as assistant to the president.

CLAY BERNARD, advanced by Westtern Air Lines to the position of assistant to the vice president-sales. He has been with WAL since 1944.

THOMAS T. HINMAN, formerly manager of airline sales-Eastern region for

Lockheed Aircraft Service, appointed general manager of the Atlantic-European Division of Transocean Airlines.

THOMAS R. O'RORKE, named executive representative for Braniff International Airways in Ecuador. He is a veteran in international airline operation.

#### **ADVERTISING** PUBLIC RELATIONS

HAYES DEVER, appointed director of public relations for Capital Airlines. He has been associated with the airline for 13 years.

JOEL D. McPHERON and GER-RITT E. ROELOF, named by Pan American World Airways to the respective posts of assistant to Vice President Willis G. Lipscomb, in charge of newspaper, magazine, and outdoor advertising; and advertising manager for the Pacific-Alaska Division. McPheron headed his own advertising agency before the war, and Roelof was director of international advertising and publicity for Walt Disney Productions.

JOHN GUENTHER, recently appointed Eastern public relations manager for Lockheed Aircraft. He is a former Newsweek editor.

DAVID E. NOPPER, named by American Airlines as Eastern regional director of public relations. He is a former newspaperman.

JOHN L. RHODES and CLYDE S. YARNELL, appointed by Florida Airways to the respective posts of director of public relations and director of sales and advertising.

#### SALES TRAFFIC

NORVAL B. RADER and EUGENE H. GEORGE, named by United Air Lines to the respective posts of assistant director of traffic and sales, and European director. Rader joined UAL in 1930 and George in

JOHN D. HARRIS, appointed export manager for the Pacific Division of Pacific Airmotive. He has been in aviation since

FRANK E. HOWELL, GEORGE B. INGRAM, RICHARD WELCH, JOHN H. CUSACK, DAVID BERG, and ROBERT FITZSTEPHENS, now serving Philippine Air Lines in the following capacities: Howell, United States agency, interline, and sales promotion manager; Ingram, New York district traffic and sales manager; Welch and Cusack, New York sales representatives; Berg, Chicago dis-trict traffic and sales manager; and Fitz-

stephens, sales rep in Los Angeles.

EDWARD J. REYNOLDS, named by Northwest Airlines to the newly created post of California traffic manager. He

joined NWA in New York two years ago.

EDGAR S. HURN, appointed district traffic manager in Montreal for Peruvian International Airways. He was formerly district sales manager in the same city for Northeast.

J. KOOT, appointed KLM's regional representative in Central America. He formerly served the airline as general traffic manager of its West Indies Division.

WILLIAM B. CALDWELL, JR., and JOHN H. KEEBLER, named by National Airlines as manager of tariffs and schedules and regional traffic manager at Miami,

respectively.

DONN H. RUDD, RAYMOND J.

KNIGHT, and MAX RODOLFO ZOZAYA, appointed by Eastern Airlines to the respective posts of traffic and sales manager in Charleston, West Virginia; traffic and sales representative in Brooklyn; and Latin American sales represen-

FRANK KIRCHBERG, named sales manager at Charleston for American Airlines. He has been with AA for 11 years.

WALTON B. ST. JOHN, appointed sales manager of the Personal Planes Division of Fairchild Engine and Airplane. He formerly served as general sales manager for Piper.

#### CARGO

W. N. HORNER and HUGH JOHNSTON, appointed by Trans-Canada





















Joel D. McPheron Norval B. Rader Eugene H. George J. G. Dammarell W. N. Horner ayes Dever

Hugh Johnston Shaun Mahoney Harold C. Gray

Air Lines to the respective positions of manager of foreign cargo sales, and manager of cargo sales and development.

J. G. DAMMARELL, now serving Eastern Air Lines as regional cargo man-ager in New Orleans. He joined EAL last

RICHARD J. DINA, named international cargo sales representative in New York for American Airlines. He has been with AA since 1940.

SAMUEL A. WALSH, ALEX-ANDER G. HARRIS, H. JOSEPH THOMAS, L. DEEN SCHWARTZ, EDWIN S. BYRD, JR., and J. R. HANDLEY, all appointed by Eastern Air Lines to regional cargo sales managerships in the following areas: Walsh, New York; Harris, Newark; Thomas, Miami; Schwartz, Chicago; Byrd, Atlanta; and Handley, Detroit.

R. W. WILLIAMS, formerly with American Airlines, who has assumed the position of eastern regional manager for Air Cargo, Inc.

#### PASSENGER

SHAUN MAHONEY, appointed district passenger superintendent of Irish Airlines in the United States. Mahoney is a well-known figure in both steamship and airline travel circles.

#### **OPERATIONS**

HAROLD E. GRAY, one of Pan American's best-known master pilots, recently appointed manager, Pacific-Alaska Division.

GEORGE V. ZOLLER, presently serving as manager of operations for American Airlines at New Castle Airport, Wilmington, Delaware.

#### MISCELLANEOUS \*

JOHN E. COOK, formerly traffic manager for Braniff and Continental, appointed rates and tariffs officer of the International Air Transport Association.

JOHN K. NORTHROP, president of Northrop Aircraft, recently elected presi-dent of the Institute of Aeronautical

Sciences.
DR. NICKOLAUS L HARDT, JR., awarded the 1946 Brewster Trophy for outstanding contributions to aviation education. He is director of Air Age Education Research.

WILLIAM M. ALLEN, president, Boeing Aircraft; J. CARLETON WARD, president, Fairchild Engine and Airplane; and LELAND D. WEBB, Western regional manager, Aircraft Industries Association, elected vice presidents of

the Aircraft Industries Association.

LAIGH C. PARKER, vice presidenttraffic for Delta, elected president for 1948

of the Air Traffic Conference of America. HERBERT J. LYALL, district sales manager of American, and chairman of the Aviation Section, New York Board of Trade, elected a director of the Board.

#### WINGED MERCHANDISE

(Continued from Page 34)

everything from watch bands and handkerchiefs to kitchen stools. The girls who handle the transmission of requests report that most inpuiries are for hardto-get items. Clothing and automobile parts are high on the list of items being ordered in this way, they say. Ordersfor as little as a single pair of anklets or two handkerchiefs have gone through the complicated process of telephone call, filing on the teletype in the retail store, assembling, packaging, labeling, loading in Kansas City, transported by air via Continental to airport of the town in which the retail store is located, and unloaded and delivered there.

#### TRAFFIC AND REVENUE TRENDS, 1947 AND 1946

Domestic Airlines, Class I Railroads, and Class I Intercity Motor Carriers of Passengers

Domes	tic Airlines					
	1947	1946	% Change			
	(9 Months Ending Sept. 30)					
Revenue Passenger-Miles (000)	4,592,117	4,385,275	+ 4.50%			
Revenue Ton-Miles-Mail (000)	23,848	24,387	- 2.21			
Revenue Ton-Miles-Express (000)	20,220	15,035	+ 34.49			
Revenue Ton-Miles-Freight (000)	19,330*	5,564	+247.41			
Passenger Revenues (000)	\$226,818	\$203,575	+ 11.42			
Mail Revenues (000)	17,082	13,603	+ 25.58			
Express Revenues (000)	7,754	5,694	+ 36.18			
Freight Revenues (000)	5,182	2,256	+129.70			
Total Operating Revenues (000)	\$262,198	\$228,800	+ 14.60			
Total Operating Expenses (000)	\$271,963	\$224,932	+ 20.91			
Class	I Railroads					
	1947	1946	% Change			
	(9 Months Ending Sept. 30)					
Pullman Passenger-Miles (000)	9,405,236**	16,231,448	- 42.06			
Day Coach Passenger-Miles (000)	21,239,635**	30,843,726	- 31.14			
Total Passenger Revenue (000)	\$725,190	\$991,613	- 26.87			
Total Mail Revenue (000)	99,880	92,926	+ 7.48			
Total Express Revenue (000)	84,563	64,857	+ 30.38			
Total Freight Revenue (000)	5,123,276	4,202,947	+ 21.90			
Total Operating Revenue (000)	6,327,777	5,621,974	+ 12.55			
Total Operating Expenses (000)	4,958,594	4,713,218	+ 5.21			
Class I Intercity Mot	or Carriers of	Passengers				
	1947	1946	% Change			
	(6 Months)					
Revenue Passengers Carried (000) ***	221,598	233,895	- 5.26			
Total Passenger Revenue (000) ***	163,183	181,782	- 10.23			
Total Operating Revenue (000)	180,388	198,466	9.11			

\* Eastern Air Lines freight ton-miles not available for Sept., 1947. Eastern Air Lines freight ton-miles for Sept., 1946, deducted to show comparable percentage change.

\*\*\* Includes an estimate for Sept., 1947.

\*\*\*\* Refers to intercity schedules only.

160,949

Total Operating Expenses (000)

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### AIR FREIGHT FORWARDERS

▲ IATA-approved foreign freight forwarders, who previously had been notified of a decision to collect fees from these agencies, have been given an extension of deadline for their payments to IATA. As a result of a meeting of international airline representatives on January 13, it has been decided to stretch the deadline to February 16. Payment of such fees has not been met with complete satisfaction by a large number of these forwarders. It is understood that the Customs Brokers and Forwarders Association of America has invited IATA-member airlines to meet and discuss the problem with its officers. ▲ Freight Cargo Agency, Inc.—new address and telephone number: 51 East 42nd Street, New York; Vanderbilt 6-4604—has combined its general air cargo and maritime shipping business with Tynan Travel Service, the new enterprise known as Tynan Transport Service, Inc. G. B. Kiely, president of Freight Cargo, supervises the new outfit as general manager. The entire Freight Cargo organization has been retained to provide its regular air cargo services. The new firm has set up a special department, Special Services, Inc., which will handle chartered aircraft for both cargo and passengers. Inaugural date of Tynan Transport Service is February 10.

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Kiely is the author of this month's guest editorial for AIR TRANSPORTATION (page 7). In this connection it is interesting to note that he has impressed his views on

Senator Homer E. Capehart, of the Senate's Committee on Interstate and Foreign Commerce, who has indicated future action on the Bland Freight Forwarding Act. Kiely would have the act include a provision for air commerce.

A Air Shippers, Inc., of Miami, recently handled a \$10,000 shipment of plumbing fixtures—52,000 pounds in all—consigned to the Corporacion Nacional de Asistencia Publica for installation in a new hospital for the aged and orphans under construction at Marianao, a suburb of Havana. Included in the shipment were 450 toilet bowls. Pan Am was the carrier.

The Official Airway Map of Florida may be received from the Florida Aviation Division, State Improvement Commission, P. O. Box 149, Tallahassee, Florida, by sending six cents in stamps to cover mailing charges.

Executive offices of Southwest Airways are now located at San Francisco Airport. Mailing address is P. O. Box 268, South San Francisco.

Operating 93 routes with 158 sectors, including the North Atlantic route which is in its second year of operation, Air France now has a network of 132,128 miles and is six times as big as it was in 1938, according to Henry J. Lesieur, general manager for North America.

#### **Landis' Final Statement**

James M. Landis, whose sudden dismissal as chairman of the Civil Aeronautics Board by President Harry S. Truman brought more than a flurry of criticism, issued the following statement on his last day as CAB chief:

"I have only this comment to make about my differences with other members of the government. I have a firm conviction that the development of the air potential of this country requires an independent Civil Aeronautics Board free of domination by other transportation and financial interests and stifled by no monopoly. Aviation will not grow as private enterprise unless, as Mr. Justice Brandeis taught me long ago, forces of competition are given full play and unless opportunities are created for the infusion of new men, like the returning GIs, with new ideas. Aviation needs even more, a sincere effort to solve the problem of air safety whatever its costs if it hopes to survive as a passenger carrying business. I hope these policies will continue to be those followed by the United States Government.

"Last night my old associate and chief on the Securities and Exchange Commission, Mr. Joseph P. Kennedy, whom I have always considered one of the ablest administrators of the Roosevelt Administration and one of the ablest business men of this country, called me to ask me to be associated with him in his enterprises. I shall go down to Florida to see him shortly after the new year."



#### AMERICA'S CARGOPLANE NEEDS

(Continued from Page 31)

cargo airplane requirements is obvious from the experience of the late war, for which there were no true cargoplanes in existence. Consequently, practically all airborne cargo was carried in adapted passenger-type aircraft which were comparable to a situation of carrying rail freight in Pullman cars.

Commercial freight carrying airplanes, as previously stated, must operate at a sufficiently high degree of overall efficiency to support themselves financially in a competitive field. Thus they must be of high aerodynamic cleanness and demonstrate their efficiency by a low realized ton-mile cost. These factors are likewise essential to a military cargo operation, although not commonly expressed in the same units of cost.

The advantage from the military standpoint of having certain basic types of cargo airplanes commonly used by all operating services is obvious. It will provide a reserve of equipment to utilize in emergency and the maintenance of an active production line permitting ready expansion as needed is of inestimable value.

It must be realized that the time required to develop and put a cargo airplane into production differs little from that of a bomber of like size. Consequently, if cargo development programs are deferred until after the active fighting types are produced, we will have an unbalanced air force because of obsolescent cargo aircraft.

Since air cargo deals with the transportation of goods only, there is a definite need and justification for a separate category of airworthiness and operations requirements which are compatible with equivalent safety for this type of aircraft as contrasted with that necessary when the air transportation of passengers is involved. Experience in air freight operations has not indi-

cated as yet the detail technical characteristics which should distinguish an air cargo category from the passenger transport category. However, the principles involved show that rules should permit operation of all-cargo airplanes at somewhat higher gross weights than passenger transports.

Analysis of a typical modern cargo airplane indicates that, say, a permitted increase of only five percent in gross weight by the introduction of a separate cargo category would result in an increase of approximately 15 percent in revenue payload per plane for practically the same total operating cost. The effect of this 15 percent increase in payload would be reflected in a corresponding rate reduction for the same margin of percent profit on gross revenue.

<sup>1</sup> It is evident from the foregoing simple analysis that large benefits will accrue economically to air cargo operations if the establishment of a separate cargo category for airworthiness and operation would afford even the suggested nominal increase in allowable gross weights of only five percent.

Nothing has been said here regarding the costs of the new cargo airplanes, but it is evident that they will be nearly equal to costs of passenger airplanes of equal size and performance. The savings on passenger accommodations will be largely offset by extra costs of cargo facilities. The development costs will also be comparable. Government financial support for the development of cargo airplanes is therefore needed, and justified, for exactly the same reasons and with the same urgency as for passenger airplanes. The Government should take the initiative in a program which will bring cargoplane development abreast of other types in the military and civil aircraft fields.

#### Iberia Traffic Affected

Swissair's bigger and better aircraft have made inroads in the Barcelona-Geneva traffic of the Spanish airline, Iberia. KLM has been wanting to open an Amsterdam-Barcelona service, but the Spanish authorities have clamped down on authorization.

#### Study Hughes-TWA Loan

Examiner Edward T. Stodola of the Civil Aeronautics Board has recommended that the CAB take steps to determine whether a \$10,000,000 loan to TWA by the Hughes Tool Company is in the public interest. He said that the board should find if the conditions placed on the loan have resulted in a further acquisition of control of the airline by the Howard Hughes-owned tool company. The Hughes firm's headquarters are at Houston, Texas.

#### REFERENCE GUIDE TO PREVIOUS ISSUES

At regular intervals, AIR TRANSPORTATION publishes lists and other information of a specialized nature as a service to its thousands of readers. The following is a handy guide to this information which has appeared in this magazine in the past year.

May, 1947......Texts of Sections 292.1 and 292.5, Economic Regulations.

June, 1947......United States Irregular
Air Carrier and NonCertificated Cargo Car-

August, 1947.....Holders and Applicants of Certificates of Public Convenience and Necessity.

October, 1947....Foreign Airlines of the World.

October, 1947....IATA-Recognized Foreign Freight Forwarders.

October, 1947..., Airline Distances Between Major Cities of the United States.

November, 1947..Landing Fees.

November, 1947..Scheduled Airlines of the United States.

December, 1947..Text of Proposed Section 292.6 Economic Regulations.

January, 1948....1947 Index

February, 1948...International Air Express and Mail Tables.

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# Adding Wings to PIGEONS

Even pigeons are turning out to be air cargoes, and the Belgian airline, Sabena, is taking full advantage of this new way to make cargo payload. Don't be surprised if, some day in the near future, American cargoplanes follow suit in this country.

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A HUNDRED years ago, the big textile manufacturers of Verviers, Belgium, were in a dither every time an Australian wool boat docked at Antwerp. The reason was an urgent need for the very latest price quotations. A Belgian genius thought up the idea of flying the prices back by carrier pigeons, and thus a new transportation practice was born, at least as far as the textile industry was concerned.

Out of this grew the racing pigeon sport—a sport which, in Belgium, brought about the organization of more than 3,000 clubs with a quarter-million pigeon fanciers as members; the publication of approximately a score of fan magazines, more or less on the order of American Hollywood publications; and even the reports of pigeon racing results in sporting papers.

Before Hitler's lebensraum engulfed Belgium, all pigeons were transported to France by train. Each Saturday night, as many as 100 trainloads of these feathered racers crossed the Franco-Belgian border. The answer is simple: a pigeon flies only in a northerly direction.

Last Summer, Sabena began flying the birds to Paris, Chartres, Orleans, Cognac, Chateaurous, Tours, Bordeaux, and Pau. Added to the total transported by trains, it is estimated that more than a half-million pigeons flew from France to Belgium each Sunday. Any way you look at it, birds are no mean cargoes.

The sport is catching on in England, Holland, Germany, Sweden, Italy, and even in the United States and Canada. Best proof is that Sabena has included not a few pigeons in its transatlantic cargoes.



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